

Review

Scientists' Warning: Remove the Barriers to Contraception Access, for Health of Women and the Planet

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Abstract: The human population reached 8 billion in 2022 and is still growing, and will possibly peak at 10.4 billion in 2086. Environmental science mandates that continued growth of the human enterprise on a finite planet is unsustainable and already in overshoot. Indeed, 3 billion is an evidence-based target number, for our species in competition with all non-human life-forms. We must achieve zero population growth and, ultimately, a massive decrease. Commonly, even among environmentalists who are not “population-deniers”, human numbers are seen as a given, to be adapted to rather than influenced or managed. Yet, just and appropriate interventions exist. The fundamental requirement is the empowerment of women, removing the barriers in many settings to their education (including environmental education, and the reproductive ethics of smaller families) and to realistic, voluntary access to contraception. Wherever “reproductive health” includes access to rights-based family planning, this not only promotes the health of the planet but also women’s health through, inter alia, their choice to have fewer and better-spaced children. This is ethical, pragmatic, and cost-effective—a prime example of preventive medicine. Politicians (mostly men) everywhere must embrace this long-term thinking and significantly increase the currently inadequate funding of contraceptive care. Herein is another Scientists’ Warning: there is just one planet for all life.

Keywords: population; sustainability; reproductive ethics; family planning; contraception; women’s health and rights; long-term thinking



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1. Introduction

In its infinite wisdom, Nature has made human reproduction so pleasant that humans reproduce themselves very effectively. Reproduction is further cherished and reinforced by culture, religion [1], and economic forces [2]. This massive pro-natalism engenders fertility levels which, if not balanced by high mortality, lead to relentless population growth.

Starting in the 19th century, human achievements in medicine and sanitation dramatically reduced worldwide death rates, especially in infancy. Birth rates, while not increasing, remained high, leading to an unprecedented human explosion from a base of circa 1.25 billion in 1850 to 8 billion in 2022 [3]. Further, assuming no massive increase in deaths from possible wars and pandemics, the median United Nations projection implies that growth will continue, with the human population possibly peaking at 10.4 billion in 2086 [4].

According to the scientific literature, however, 2 to 3 billion is the maximum sustainable long-term human population, given the inevitable environmental impact [5–10]. We would require a total fertility rate (TFR) close to one to get our population down to this sustainable number in the timescale now indicated, i.e., within this century, without massive mortality [11]. Yet, this is unfortunately too ambitious at this time, as even TFR 2.1 will take a lot of work to achieve globally, though many countries are now below this TFR.

TFR 2.1 ensures a non-increasing population as one child replaces the mother, another replaces the father, and the 0.1 accounts for children who do not live to reproductive age. The number can be higher where the child mortality rate is high, namely 2.2 or 2.3. Fortunately, child mortality has dropped considerably in the past decades worldwide; thus, 2.1 is used as a target level to achieve zero population growth. However, as mentioned above, we need to go further and decrease. This view is fully supported by the *Scientists' Warning on Population* [12], a part of the ongoing series of scientists' warning publications, initiated after publication of the *Scientists' Warning to Humanity: A Second Notice* [13].

The current global TFR is 2.31 [4], which is remarkable given that, in the middle of the 20th century, it was over 5, but this mean hides significant variations between countries and geopolitical regions and does not support complacency regarding world population growth, which continues at 70 to 80 million people annually.

2. Roots of Growth

To evaluate this global imbalance, we need to identify the roots of population growth. There are five [3]:

The first root of population growth results from mortality decline. This trend is positive, and any movement in the opposite direction to bring the human population to sustainable numbers would be unacceptable.

The second root results from demographic/population momentum. This momentum results from the "population bulge" of young future parents born earlier, when a country's TFR was higher, and entering reproductive age. In other words, the population continues to grow, not because the TFR is above replacement level but because more humans are at an age likely to reproduce than at an age likely to die. The population will keep growing until the number of humans reaching the end of their life are no longer outnumbered by their grandchildren. This is now the case in many countries of the Global North, although many keep growing due to immigration [14]. In most countries of the Global South, the populations are young, so even when fertility rates drop, and the current generation of parents adopt a small family norm, i.e., TFR 2.1 or below, the number of humans will continue to grow.

The third root represents wanted fertility, which is children from intended pregnancies. The preference for large family size can change, through education and the media [15].

The fourth root, routinely overlooked, results from what is essentially coerced fertility, of women who have no other choice in life beyond childbearing. This is especially a problem in countries or settings that limit, suppress or do not accept women's rights and freedom of choice [16].

The fifth root results from unwanted fertility, through pregnancies that occur at times when women do not want to become pregnant—either sooner than they wish or when they do not wish for additional children. Globally, this component makes up nearly 41% of all pregnancies (some 86 million out of 208 million pregnancies a year) [17].

It is a myth that the dangerous trajectory of population growth this century is set and cannot be altered without abhorrent levels of coercive birth control. The last three components above can and must all be targeted, non-coercively, wisely, humanely, and compassionately. As doctors and healthcare providers, we will focus mainly on the fifth category, which is within our field of expertise. However, before that, we should briefly mention the other solutions.

3. Solutions

Generally, there are two categories [3]:

The first group of "solutions" are negative or coercive measures such as the infamous forced sterilisations performed in the 1970s by the Indira Gandhi government of India, or aspects of the implementation of the "One Child Policy" commenced in the late 1970s in China. These measures are both abhorrent and unethical. They have, variously, either

been unnecessary when applied or have been counter-productive, and have damaged perceptions of the well-meant struggle to achieve sustainable human numbers.

The second group of solutions are positive or non-coercive measures [18–20]. These can be summarised as the removal of barriers to women's and couples' ability to decide and achieve the number and timing of their children, as discussed further below.

Delaying children (lengthening generations), that is, waiting until age 30 on average to commence childbearing, instead of 15 or 20, is another effective and positive measure against population momentum. Doctors and healthcare providers usually tend to push in the other direction, discouraging women from delaying childbearing, even though few women risk infertility and pregnancy or delivery complications by delaying until their mid-thirties. Delaying children can also have social and health benefits, especially in countries of the Global South (mainly Sub-Saharan Africa, Latin America, and the Caribbean), where the frequent problem is adolescent pregnancies that pose pregnancy and delivery complications [11], but are also associated with poverty and social unrest [21,22].

There are many ways to educate and explain the environmental impact of human procreation [23,24]. Explaining the planetary impact in readily understood terms, *inter alia*, utilising the storylines of serialised dramas or "soap operas", is worth mentioning here [15]. Education and the media have greatly under-used potential to inform every human on the planet of the advantages of small families and the pros and cons of various options for birth control, on the grounds that are both personal/humanitarian and environmental/climate friendly.

3.1. Family Planning

There is a large but much-neglected literature on how family planning methods and services help to curb population growth [22,25]. The availability and full accessibility of these methods are essential for another reason: it is a fundamental human right that humans can freely regulate the number of their children and the spacing between them, just as children have the right to be born as wanted children. These rights have been repeatedly reaffirmed in international conferences and treaties [26–30].

The human population grows by over 80 million a year. Of the 121 million unintended pregnancies, many miscarry, and others are aborted, so some 80 million are carried to term. Coincidentally, the number of unintended births is close to the net growth of the human population [17]. In a hypothetical world, in which everyone is aware of contraception methods, has ready access to them, and uses them appropriately, there is a good chance that the human population would stabilise and/or start decreasing without the need for other measures.

We need to say here that it is at least as important to avoid unintended pregnancies in the countries of the Global North as in the Global South because these cause the most environmental impact, due to high consumption and resource use per person [31]. At the same time, it is important in the Global South and among developing countries, since ending population growth there is a key to improving poorer people's lives.

Some can object that family planning is a Western concept and should not be imposed on cultures and religions that like having many children. Yes, Western scientists invented contraception, but since the 1960s, governments and communities worldwide have welcomed it [32]. Many countries in the past and present were able, due to the use of family planning methods and services, to curb their population growth, and they now benefit from improving economies (South Korea, Taiwan, Singapore, Thailand, Kerala, Rwanda, Costa Rica) [32,33]. One could equally say that the technologies used to improve health and survival of children are Western concepts. Deploying one without the other is what triggered population growth and made traditional cultural and technological practices ill-adapted to the new, crowded circumstances. Both disease control and birth control should be seen as fruits of science, completely unrelated to West or East, North or South divisions. The Pill, or contraception in general, helps women decide when and how many

children they want. Obviously, this creates dislike and conflict in cultures in which males dominate. However, the primary people who should decide are women.

Economists and others who argue that people in low-resource settings need, and choose to have, large families ignore one vital fact: that potentially fertile intercourse occurs far more frequently than the minimum needed for desired conceptions [34]. Hence, having a large rather than a small family is usually not, as portrayed, a planned decision—couples in low-resource settings actively setting out to have many children for economic and “social security” reasons. It is instead an automatic outcome of human sexuality. If fertile, sex at normal frequency and absent family planning equates to a large family, irrespective of any socio-economic motivation or reasoning. There is no other option. Something active needs to be done to separate sex from conception—namely, family planning. Without that being easily accessible, the “default state” for all fertile couples in every possible setting is a large family: quite simply, that is what happens when you are not able to not have a large family. However, it is typical of cultural norms that the inevitable becomes not only expected but desired, so information and often the blessing of religious or tribal leaders is needed to make small families an accepted and desirable option.

The repeated experience of countries and regions with very varied cultures, religions, and politics has been that birth rates drop rapidly, regardless of poverty, illiteracy or rural settings, when governments or NGOs implement culturally sensitive family planning services and public education campaigns [35,36].

However, access to family planning is often difficult in resource-poor settings [21,22], so that many children arrive by chance not by choice (though this fact is overlooked because, usually, and entirely naturally, they are then welcomed) [17]. The primary cause is the many barriers to women being able to choose a smaller family, including the basic barrier of no access to a good range of family planning methods themselves [37]. Obviously, increasing per capita wealth usually removes this and other barriers. Yet, there is no need to wait in the (often forlorn) hope of that happening, nor to use compulsion to hasten change. There is no country with above-replacement fertility which cannot now, with purely voluntary measures, make a good start in enabling couples to reduce average family size.

To change the context of decision-making in low-resource settings requires contraceptives to be available and accessible and promoted, by good use of the media [15]. The multiple barriers to their use need to be removed. These include fatalism (“God has planned my family size”), misinformation about contraceptive side effects, religious prohibitions, cultural pronatalism, political correctness, and also economic pressures [2]. As shown in many countries, such barriers are removable: through education and empowerment of girls and women, but also of boys and men, and all measures to reduce gender-based violence. The education must have a component that leads to greater environmental literacy, including the environmental and reproductive ethics of small(er) families, namely Fewer Children Ethics [11,12].

Eliminating the barriers women face, caused largely by men, in a rights-based way, is a tried and tested means which has worked in the many success-story countries (e.g., Iran or Thailand) and states (e.g., Kerala within India).

Moreover, there is no way it can be legitimately deemed “coercive” to advocate for removal of the barriers, tangible and intangible, to what women actually want! Providing family planning methods and services is the ethical thing to do.

Some contraceptives also have positive non-contraceptive benefits, such as protection from ovarian cysts, endometriosis, infertility, as well as ovarian, endometrial, and colorectal cancer [38–41].

Moreover, family planning is not an issue for women alone. Men have an often neglected yet reliable option, namely vasectomy. Therefore, significant funding should be allocated to educate men and the public generally about this highly effective and safe contraceptive option [12,42].

Family planning is not only ethical, and wanted as a choice, it is also pragmatic and cost-effective. According to the Copenhagen Consensus, for every USD 1 spent on family

planning, the return on investment is USD 120 [43]. Not only are timely precautions far cheaper, saving on additional costs such as maternal and newborn care, but they also save the lives of women and children.

Last and certainly not least, contraception can help to mitigate both climate change and the species extinction crisis [31,44] which has resulted from massive habitat destruction, through agriculture and other endeavours of a single inordinately successful species, *H. sapiens*.

3.2. Greater Investments

In light of all this, it is striking that politicians and decision-makers (who are mostly men) are uninterested in investing in family planning: they even make cuts into family planning programs, exemplified by the United Kingdom's decision to cut 85 per cent of its contribution to a flagship United Nations Family Planning Programme in 2021 [45,46]. They may quote the falling mean world TFR which has recently reached 2.31, not perceiving that this in no way justifies complacency since the mean hides the fact that one-quarter of the circa 200 countries of the world still have above-replacement fertility rates. Given that child mortality rates have dropped dramatically, even in the poorest countries, the distance between average family size and that needed to replace the parents has widened in many countries, particularly in Sub-Saharan Africa [4].

Some TFR rates, such as in Niger and Uganda are still very far above. Moreover, some with at- or below-replacement TFRs will experience demographic momentum (see above) for decades to come and would benefit from still-lower birth rates.

Indeed, the logistic task of providing contraceptive services for all has obviously increased, since the absolute number of potential future parents on Earth is higher than it has ever been. Yet, to finance that task, the amount of money needed is minuscule in comparison with that needed to address the numerous adverse effects of the whole human enterprise—such as climate change. The Guttmacher Institute estimated in 2020 that an extra USD 5.5 billion per year was needed to meet unmet needs for family planning services in low and middle income countries, while an additional USD 29.2 billion would fulfil needs for both family planning and maternal and infant healthcare [47]. This represents a near doubling of the currently derisory and diminishing level of about 1% of foreign aid [48].

For illustration, in 2022, there were an estimated 218 million women in the developing world who wanted to prevent pregnancy but had an unmet need for contraception [49].

3.3. Long-Term Thinking

With curative medicine, you save one life, and everyone can see it, while with preventive medicine, you save ten lives, but no one sees that, because the benefits are much longer term and the individual may not be aware that they benefited. Family planning is a prime example of preventive medicine.

We now need politicians and decision-makers to embrace the same long-term thinking. They cannot ignore the fact the more people there are, the more resources are consumed, and pollution of all kinds, including by greenhouse gases, is increased [50]. It is simple math. It is not only about ecological footprints but also about the number of feet. Additionally, with the middle class growing worldwide, ever more people will want to consume more and more. Everyone strives to achieve better living standards, and theoretically, all people should be able to achieve the basic comforts (if not the excesses of consumerism) that most have in the wealthiest countries. The problem is that humankind has just one home: there is no "Plan-et B" [31].

Some assert that it is xenophobic and racist for Europeans to present this view, due to a mistaken notion that this can only mean preventing the multiplication of races and cultures unlike your own. On the contrary, we regard it as a compassionate, humanitarian view. The people of high-fertility countries are the most threatened by the impacts of population increase, and stand to benefit most from lower birth rates. It is sad that, even

in the conservation/environment movement, so many—despite privately fully endorsing the importance of the population factor—self-censor about the matter in public through fear of being vilified and so avoid serious discussion of it, or even delegitimise population concerns [51,52].

Increasingly, low-income countries openly acknowledge that their burgeoning population poses a problem to their country and their economy. There is not enough employment, the schools' capacities are overstretched, and there is insufficient water, food, and more. High-income countries need to acknowledge that their current populations are excessive, and decreasing them is a necessary component in the creation of environmentally sustainable societies.

Short-term thinking only causes short-term relief and does not solve the primordial origins of problems. As Norman Borlaug, the father of the Green Revolution, concluded in his Nobel Prize Acceptance Speech where he introduced the term “the Population Monster”:

“The Green Revolution has won a temporary success in man’s war against hunger and deprivation; it has given man a breathing space. . . . However, the frightening power of human reproduction must also be curbed; otherwise the success of The Green Revolution will be ephemeral only. Most people still fail to comprehend the magnitude and menace of the ‘Population Monster’.” [53].

For two decades following Borlaug’s speech, international efforts to moderate population growth through voluntary family programs made considerable progress [35]. However, efforts and achievements to extend family planning access have been slower in the past 30 years, and the tide of food insecurity appears to be ebbing once more [54,55].

4. Conclusions

In 2020, Sir Sabaratnam Arulkumaran, Emeritus Professor of Obstetrics and Gynaecology, St. George’s University of London, gave a keynote lecture at the All India Congress of Obstetrics and Gynaecology entitled *The World Will Sink Without Contraception* [56]. The title says it all, and we agree with its content and clarity.

There is a way to ameliorate a situation where a large family is not a synonym for wealth but poverty, where too many children place a burden on the planet, the state, the school system, and more. “Demography is destiny” is erroneous, yet most authorities active in both development and the environment continue to see population growth as inevitable, a “given”, not amenable to intervention. We have an intervention, the technology known as contraception and the portfolio of measures that come under the umbrella of voluntary family planning programs. Yet, such authorities discount that, and so advocate publicly only to predict and provide for ever proliferating human numbers; despite that goal having become an impossible task on a finite planet [57], as most of these authorities privately admit. They often fear, neglecting the abundant evidence to the contrary, that we can do little about our growing numbers without coercive, deplorable measures such as forced sterilisations. This is to count on fate to solve our problems.

How will history judge us if we fail to grasp the dangers deriving from vast human numbers, and if we fail to protect this planet by dismissing the most humane and ethical thing to do, i.e., to provide all those who need and want birth control in every region with modern contraception and family planning, including legal abortion?

We must see that limiting our reproduction is the most ethical thing to do and think and act long-term, because there is just one planet for all of us. This is especially true for unintended births, but our family size intentions should also be reviewed in the light of intensifying environmental crises. After all, *“we have not inherited the Earth from our grandparents, we have borrowed it from our grandchildren”* [44].

It is self-evident that tomorrow’s world will, for our grandchildren and indeed for the whole Web of Life, be a happier and safer place if there are not overwhelmingly too many humans competing, often violently, for what remains from their “loan” to us.

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References

- Gregus, J. Catholicism and Contraception. *Ceska Gynekol.* **2019**, *84*, 468–474. [PubMed]
- PMC. *Population Growth and Wealth Inequality Are More Entwined Than We Thought: Here’s Why*; Population Media Center: South Burlington, VT, USA, 2023; Available online: <https://www.populationmedia.org/the-latest/population-growth-and-wealth-inequality-are-more-entwined-than-we-thought-heres-why> (accessed on 15 August 2023).
- Gregus, J.; Guillebaud, J. Doctors and Overpopulation 48 Years Later: A Second Notice. *Eur. J. Contracept. Reprod. Health Care* **2020**, *25*, 409–416. [CrossRef]
- UNDESA. *World Population Prospects 2022: Summary of Results*; United Nations Department of Economic and Social Affairs: New York, NY, USA, 2022; Available online: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf (accessed on 1 June 2023).
- Daily, G.C.; Ehrlich, A.H.; Ehrlich, P.R. Optimum Human Population Size. *Popul. Environ.* **1994**, *15*, 469–475. [CrossRef]
- Pimentel, D.; Harman, R.; Pacenza, M.; Pecarsky, J.; Pimentel, M. Natural Resources and an Optimum Human Population. *Popul. Environ.* **1994**, *15*, 347–369. [CrossRef]
- Pimentel, D.; Whitecraft, M.; Scott, Z.R.; Zhao, L.; Satkiewicz, P.; Scott, T.J.; Phillips, J.; Szimak, D.; Singh, G.; Gonzalez, D.O.; et al. Will Limited Land, Water, and Energy Control Human Population Numbers in the Future? *Hum. Ecol.* **2010**, *38*, 599–611. [CrossRef]
- Lianos, P.; Pseiridis, A. Sustainable Welfare and Optimum Population Size. *Environ. Dev. Sustain.* **2016**, *18*, 1679–1699. [CrossRef]
- Dasgupta, P. *Time and the Generations: Population Ethics for a Diminishing Planet*; Columbia University Press: New York, NY, USA, 2019.
- Tucker, C. *A Planet of 3 Billion*; Atlas Observatory Press: Washington, DC, USA, 2019.
- Gregus, J. Sustainability, Population and Reproductive Ethics. *Ceska Gynekol.* **2023**, *88*, 190–199. [CrossRef]
- Crist, E.; Ripple, W.J.; Ehrlich, P.R.; Rees, W.E.; Wolf, C. Scientists’ Warning on Population. *Sci. Total Environ.* **2022**, *845*, 157166. [CrossRef]
- Ripple, W.J.; Wolf, C.; Newsome, T.M.; Galetti, M.; Alamgir, M.; Crist, E.; Mahmoud, M.I.; Laurance, W.F. World Scientists’ Warning to Humanity. A Second Notice. *BioScience* **2017**, *67*, 1026–1028. [CrossRef]
- Cafaro, P.; Dérer, P. Policy-Based Population Projections for the European Union: A Complementary Approach. *Comp. Popul. Stud.* **2019**, *44*, 171–200. [CrossRef]
- PMC. Population Media Center Website. Available online: <https://www.populationmedia.org/> (accessed on 1 June 2023).
- PM. *Welcome to Gilead. Pronatalism and the Threat to Reproductive Rights. A Population Matters Report*; Population Matters: London, UK, 2021; Available online: <https://populationmatters.org/resources/welcome-to-gilead-report/> (accessed on 1 June 2023).
- UNFPA. *Nearly Half of All Pregnancies Are Unintended—A Global Crisis, Says New UNFPA Report*; United Nations Population Fund: New York, NY, USA, 2022; Available online: <https://www.unfpa.org/press/nearly-half-all-pregnancies-are-unintended-global-crisis-says-new-unfpa-report> (accessed on 1 June 2023).
- Rieder, T. *Toward a Small Family Ethic. How Overpopulation and Climate Change Are Affecting the Morality of Procreation*; Springer: Cham, Switzerland, 2016.
- Conly, S. One Child: Do We Have a Right to More? *J. Popul. Sustain.* **2016**, *1*, 27–34. [CrossRef]
- Austen, J. *Save the Earth. . . Don’t Give Birth*; Amazon: Bellevue, WA, USA, 2018.
- Mbizvo, M.; Phillips, S. Family Planning: Choices and Challenges for Developing Countries. *Best Pract. Res. Clin. Obstet. Gynaecol.* **2014**, *28*, 931–943. [CrossRef]
- Sultan, S. The Effects of Education, Poverty, and Resources on Family Planning in Developing Countries. *Clin. Mother Child Health* **2018**, *15*, 1000289. [CrossRef]
- Crist, E.; Mora, C.; Engelman, R. The Interaction of Human Population, Food Production, and Biodiversity Protection. *Science* **2017**, *356*, 260–264. [CrossRef] [PubMed]
- Cafaro, P.; Hansson, P.; Gotmark, F. Overpopulation Is a Major Cause of Biodiversity Loss and Smaller Human Populations Are Necessary to Preserve What Is Left. *Biol. Conserv.* **2022**, *272*, 109646. [CrossRef]
- Western Cape Government. *Family Planning: Empowering People, Developing Nations*; Western Cape Government: Cape Town, South Africa, 2020. Available online: <https://www.westerncape.gov.za/general-publication/family-planning-empowering-people-developing-nations> (accessed on 15 August 2023).

26. Commissioner for Human Rights. *Protect Women's Sexual and Reproductive Health and Rights*; Council of Europe: Strasbourg, Belgium, 2016; Available online: <http://www.coe.int/en/web/commissioner/-/protect-women-s-sexual-and-reproductive-health-andrights> (accessed on 1 June 2023).
27. FIGO. *Committee for Women's Health and Human Rights: Newsletter 2017*; International Federation of Gynecology and Obstetrics: London, UK, 2023; Available online: <https://www.ggolfb.be/sites/default/files/article/file/FIGO%20COMMITTEE%20FOR%20WOMEN%E2%80%99S%20HEALTH%20AND%20HUMAN%20RIGHTS.pdf> (accessed on 1 June 2023).
28. FIGO. *Rights-Based Approach to Women's Health*; International Federation of Gynecology and Obstetrics: London, UK, 2023; Available online: <https://www.figo.org/sites/default/files/uploads/OurWork/FIGO%20WHHR%20C%20Rights-based%20approach%20to%20Women%27s%20Health.pdf> (accessed on 1 June 2023).
29. The Nairobi Summit on ICPD 25. *Accelerating the Promise. Nairobi Statement. 2019*. Available online: <http://www.nairobisummiticpd.org/content/icpd25-commitments> (accessed on 1 June 2023).
30. FIGO. *FIGO Response to the Nairobi Statement*; International Federation of Gynecology and Obstetrics: London, UK, 2023; Available online: <https://www.figo.org/news/figo-response-nairobi-statement-0016276> (accessed on 1 June 2023).
31. Guillebaud, J. Voluntary Family Planning to Minimise and Mitigate Climate Change. *BMJ* **2016**, *353*, i2102. [CrossRef]
32. TOP. The Overpopulation Project Website. *Family Planning Success Stories*. Available online: <https://overpopulation-project.com/family-planning-success-stories/> (accessed on 15 August 2023).
33. PM. *Power to the People: How Population Policies Work*; Population Matters: London, UK, 2023; Available online: <https://populationmatters.org/resources/power-to-the-people-how-population-policies-work/> (accessed on 15 August 2023).
34. Blue Planet United. *Do Economists Have Frequent Sex? By Martha Campbell and Malcolm Potts*; Blue Planet United: Redlands, CA, USA, 2016; Available online: <https://blueplanetunited.org/archives/populationpress/do-economists-have-frequent-sex-by-martha-campbell-and-malcolm-potts/> (accessed on 1 June 2023).
35. Robinson, W.C.; Ross, J.A. (Eds.) *The Global Family Planning Revolution*; World Bank: Washington, DC, USA, 2007; 496p, ISBN 0-8213-6951-2. Available online: <https://openknowledge.worldbank.org/handle/10986/6788> (accessed on 7 September 2023).
36. O'Sullivan, J.N. The contribution of reduced population growth rate to demographic dividend. In *Proceedings of the 28th International Population Conference, Cape Town, South Africa, 30 October–3 November 2017*; Available online: <https://iussp.confex.com/iussp/ipc2017/meetingapp.cgi/Paper/2521> (accessed on 7 September 2023).
37. Campbell, M.; Prata, N.; Potts, M. The Impact of Freedom on Fertility Decline. *J. Fam. Plan. Reprod. Health Care* **2013**, *39*, 44–50. [CrossRef] [PubMed]
38. Chin, J.; Bliss, K. Hormonal Contraception. In *Oxford Textbook of Endocrinology and Diabetes*; Wass, J., Arlt, W., Semple, R., Eds.; Oxford University Press: Oxford, UK, 2022; pp. 1384–1392. [CrossRef]
39. Sitruk-Ware, R.; Nath, A.; Mishell, D.R. Contraception Technology: Past, Present and Future. *Contraception* **2013**, *87*, 319–330. [CrossRef]
40. Wilkinson, T.A.; Kottke, M.; Berlan, E.D. Contraception for Adolescents during the Coronavirus Disease 2019 Pandemic. *JAMA Pediatr.* **2021**, *175*, 322. [CrossRef] [PubMed]
41. Miller, T.A.; Allen, R.H.; Kaunitz, A.M.; Cwiak, C.A. Contraception for Midlife Women: A Review. *Menopause* **2018**, *25*, 817–827. [CrossRef]
42. World Vasectomy Day. Available online: <https://wvd.org> (accessed on 29 June 2023).
43. CCC. *Post-2015 Consensus: Population and Demography Assessment, Kohler Behrman. Assessment Paper*; Copenhagen Consensus Center: Tewksbury, MA, USA, 2023; Available online: https://copenhagenconsensus.com/sites/default/files/documents/population_assessment_-_kohler_behrman.pdf (accessed on 1 June 2023).
44. Guillebaud, J. The Environment Time Capsule 1994–2044. Available online: <https://www.ecotimecapsule.com> (accessed on 1 June 2023).
45. UNFPA. *Statement on UK Government Funding Cuts*; United Nations Population Fund: New York, NY, USA, 2021; Available online: <https://www.unfpa.org/press/statement-uk-government-funding-cuts> (accessed on 1 June 2023).
46. UN News. *UK's 85% Family Planning Aid Cut Will Be Devastating for Women and Girls Says UNFPA, While UNAIDS Also 'Deeply Regrets' Cuts*; United Nations: New York, NY, USA, 2021; Available online: <https://news.un.org/en/story/2021/04/1090892> (accessed on 1 June 2023).
47. Sully, E.A.; Biddlecom, A.; Darroch, J.E.; Riley, T.; Ashford, L.S.; Lince-Deroche, N.; Firestein, L.; Murro, R. *Adding It Up: Investing in Sexual and Reproductive Health 2019*; Guttmacher Institute: New York, NY, USA, 2020. [CrossRef]
48. Guttmacher Institute. *Just the Numbers: The Impact of US International Family Planning Assistance, 2022*; Guttmacher Institute: New York, NY, USA, 2023; Available online: <https://www.guttmacher.org/2023/03/just-numbers-impact-us-international-family-planning-assistance-2022> (accessed on 1 June 2023).
49. Population Connection Action Fund. *Budget of the US Government. Fiscal Year 2022. What Would a Billion More Buy?* Population Connection Action Fund: Washington, DC, USA, 2023. Available online: <https://www.populationconnectionaction.org/policy-priorities/international-family-planning-funding/> (accessed on 1 June 2023).
50. Dodson, J.; Dérer, P.; Cafaro, P.; Gotmark, F. Population Growth and Climate Change: Addressing the Overlooked Threat Multiplier. *Sci. Total Environ.* **2020**, *748*, 141346. [CrossRef] [PubMed]
51. Coole, D. Too Many Bodies? The Return and Disavowal of the Population Question. *Environ. Politics* **2013**, *22*, 195–215. [CrossRef]

52. Washington, H.; Kopnina, H. Discussing the Silence and Denial around Population Growth and Its Environmental Impact. How Do We Find Ways Forward? *World* **2022**, *3*, 1009–1027. [CrossRef]
53. The Nobel Prize. Norman Borlaug. Nobel Lecture. The Green Revolution, Peace, and Humanity. Available online: <https://www.nobelprize.org/prizes/peace/1970/borlaug/lecture/> (accessed on 7 September 2023).
54. FAO. *The State of Food Security and Nutrition in the World 2023*; Food and Agriculture Organization of the United Nations: Rome, Italy, 2023; Available online: <https://www.fao.org/documents/card/en/c/cc3017en> (accessed on 7 September 2023).
55. IMF. *Global Food Crisis Demands Support for People, Open Trade, Bigger Local Harvests*; International Monetary Fund: Washington, DC, USA, 2022; Available online: <https://www.imf.org/en/Blogs/Articles/2022/09/30/global-food-crisis-demands-support-for-people-open-trade-bigger-local-harvests>. (accessed on 7 September 2023).
56. Arulkumaran, S. The World Will Sink Without Contraception. In *All India Congress of Obstetrics & Gynaecology*; Smriti Upvan: Lucknow, India, 2020.
57. Bradshaw, C.J.A.; Ehrlich, P.R.; Beattie, A.; Ceballos, G.; Crist, E.; Diamond, J.; Dirzo, R.; Ehrlich, A.H.; Harte, J.; Harte, M.E.; et al. Underestimating the Challenges of Avoiding a Ghastly Future. *Front. Conserv. Sci. Sec. Glob. Biodivers. Threat.* **2020**, *1*, 615419. [CrossRef]

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