

World Population Growth: A Once and Future Global Concern

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Abstract: The challenge posed by global population growth has been clear to most scientists since at least the 1950s. In the 1970s, it became conventional wisdom that “the population explosion” constituted a threat to humanity and to sound social, economic and ecological development. This conviction was clearly demonstrated at UN conferences on the environment (1972) and population (1974). It was also confirmed in the important UN report *Our Common Future*, presented by the Brundtland Commission in 1987. Since the 1990s, international interest in population issues has decreased dramatically and has even become a taboo in certain academic and political discourses. This paper will try to analyze some of the reasons for these changes in attitudes and will present proposals on how to push the population issue back on to the international agenda.

Keywords: population growth; population explosion; population control; population taboo; ICPD; sustainable population

1. History

In 1798, the British cleric and economist Thomas Robert Malthus wrote *An Essay on the Principle of Population* [1]. He observed that human betterment required food production to grow quicker than the population because there would always be a risk that the poorer segments of the population (in England at the time) would suffer if food production was lagging behind. He was witnessing how poor families were suffering and how every new child worsened the situation. In his essay he warned of serious social consequences, such as famine, social turbulence or even war if the population was allowed to grow without control. His message was considered overly pessimistic already during his lifetime and it has remained controversial over the centuries since.

When Malthus wrote his essay, the world population was just about to reach a total of one billion.

What Malthus could not have foreseen around the year 1800 was of course the enormous consequences of the industrial, technological and scientific revolution during the following centuries. He could not have foreseen the rapid development in agriculture, including the “green revolution”. Equally, he could not have foreseen the remarkable achievements in medicine. These achievements made decision-makers and public opinion optimistic about future development and “Malthusianism” was more or less forgotten by most people for long periods of time.

Malthus’ ideas experienced a kind of revival in the 1960s and 1970s. Rapid post-war development raised public consciousness about the negative effects of industrial pollution on nature and the environment. Scientists like Rachel Carson [2], Georg Borgström [3] and Paul Ehrlich [4] raised fingers of warning and expressed concern about the human impact on nature. The famous group of international senior scientists, the Club of Rome, summarized many of the warnings in its report *Limits to Growth* in 1972 [5].

At the political level, the Scandinavian governments and Canada took the initiative to advocate UN action on both the environment and population. According to the Swedish diplomat Lars Göran Engfeldt [6], it took several years of intensive persuasion in the corridors of the UN before decisions could be taken on organizing:

- The first UN Conference on the Environment in Stockholm in 1972 [7];



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- The first UN Conference on Population in Bucharest in 1974 [8].

Both conferences were successful and were highly influential on the international development agenda during the rest of the decade. In this connection, the UN also decided to create special agencies for these two fields of priority:

- The United Nations Environmental Program, UNEP, based in Nairobi;
- The United Nations Fund for Population Activities, UNFPA, based in New York.

In line with strong recommendations from the first Population Conference, many developing countries started giving priority to “birth control” and to ambitious family planning programs. Donor countries, like Sweden, together with agencies such as the UNDP and the UNFPA, became strongly involved in supporting family planning programs. India, with a rapidly growing population, became something of a role model for other developing countries in setting very ambitious targets for its population program [9]. The Prime Minister Indira Gandhi took a strong personal interest in the program. Big achievements were reported regarding education for girls and the increased use of contraceptives and, as a consequence, reduced birth rates in many parts of this huge country.

However, something went wrong. Some executives of the Indian program became so overambitious that they abandoned the principle of voluntary birth control, enshrined in the UN Declaration of Human Rights. They introduced sterilization programs in which men and women were tempted to become sterilized through promises of a motorbike or an economic reward; some were threatened with losing their jobs if they did not accept to undergo vasectomies while others were involuntarily sterilized [10]. When news about this abuse came out, the Indian family planning scandal was a fact. This ill-advised episode tainted family planning efforts internationally and by 1980 the international reputation of population programs was seriously damaged. The coercive measures taken in India were of course exceptions, but family planning from now on suffered from guilt by association.

To add to the Indian scandal, the Chinese leadership under Deng Xiaoping introduced the draconian “one-child-policy” in 1980. This policy was introduced after a decade of promotion of voluntary family planning in China, which had already seen national fertility more than halved. The one-child policy’s heavy-handed implementation went beyond severe punitive measures to include even forced abortions. As cultural values still highly valued sons, the one-child rule led to many abortions of female fetuses and even the killing of baby girls, evident in the surplus of males over females in China’s population. The program soon met hard criticism throughout the democratic world. This criticism led to some revisions during the 1980s (a second child was allowed if the first child was a daughter and exceptions were made for some ethnic minorities), but the general negative impression remained [11].

After these two highly criticized “population control” programs, the second Population Conference in Mexico City in 1984 was already less enthusiastic about the need for active population policies than the first one [12]. Although criticism was raised, the conference still produced a number of recommendations. After all, the world population had now reached 4.5 billion. Developing country governments were increasingly concerned about the rapid growth in population impeding their economic development.

This concern and the evident impact of population change on the environment and development were clearly recognized in the Report of the *UN Commission on the Environment and Development*. The commission was composed of an international group of high-level scientists and politicians, with the Norwegian Prime Minister (and medical doctor) Gro Harlem Brundtland as chairperson. The Commission Report “*Our Common Future*” (1987) introduced, for the first time, the concept of *Sustainable Development*. The whole of Chapter 4 was devoted to the negative impact of rapid population growth on the possibilities for sustainable development [13].

Nonetheless, the third Population Conference in Cairo in 1994 was a setback for advocates of an active population policy. The concept of “Family Planning” was now replaced by the concept of “*Sexual and Reproductive Health*”. The Cairo conference was also *the very*

last UN Population Conference [14]. Since then, population issues have generally been given lower priority in both UN affairs and bilateral development cooperation programs.

Since the turn of the century, climate change has been high up the International agenda. In 2015, the UN decided on 17 Global Goals aiming to end poverty and protect the planet by 2030 [15]. The goals are important and include gender equality and education for all. But the concept “population growth” is not mentioned. The emphasis in the debate and research on the climate threats seems to be on shifting from fossil fuel to emission-free energy technologies, and reducing the carbon footprint per person, but not on minimizing the numbers of people requiring energy and resources. Scientists and journalists who argue for an active population policy have been ridiculed, called “doomsday demagogues” or “confused Malthusians” [16,17]. Unfortunately, a number of popular authors contributed to these tendencies with overoptimistic views of the future. A prominent example was the Swedish medical professor, the late Hans Rosling, whose popular online videos and 2018 book *Factfulness* argued that the population will soon stop growing automatically as every corner of the world can expect improving wealth, health and education [18]. The selective nature of his analysis has drawn valid criticisms, e.g., [19,20]

The importance of an active population policy seems to have been rediscovered by some scientists and politicians only in recent years (from about 2015). The increasing urgency to minimize climate change, the dramatic negative changes in the planet’s biodiversity and the increased numbers of “climate refugees” seem finally to be serving as a wake-up call [21–23].

2. The Situation in 2023

The world population reached 8 billion in November 2022 [24]—eight times more than the population size when Malthus expressed his concern 225 years ago (Figure 1 and Table 1).

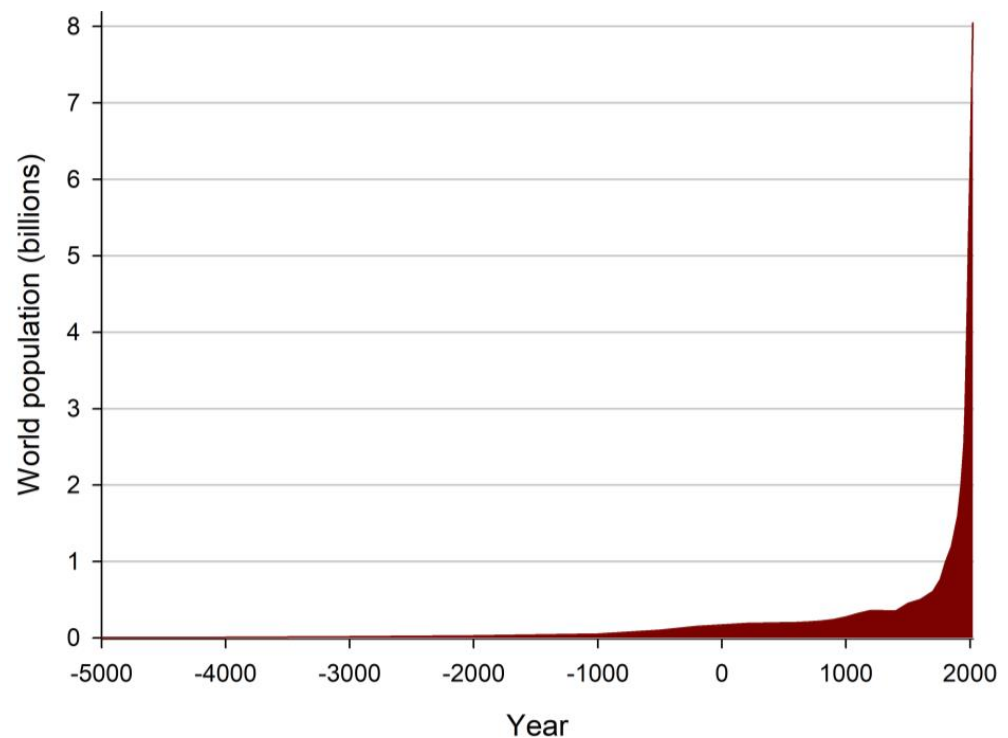


Figure 1. World population growth from 5000 BC to 2022. Data from Worldometer [25].

Table 1. Population of the world and major areas, 2020, 2030, and 2050, according to the United Nations medium-variant projection.

| | Major Area Population (Millions) | | |
|---------------------------------|----------------------------------|------|------|
| | 2022 | 2030 | 2050 |
| World | 7942 | 8512 | 9687 |
| Sub-Saharan Africa | 1152 | 1401 | 2094 |
| Northern Africa and West Asia | 549 | 617 | 771 |
| Central and Southern Asia | 2075 | 2248 | 2575 |
| Eastern and Southeast Asia | 2342 | 2372 | 2317 |
| Latin America and the Caribbean | 658 | 695 | 749 |
| Australia/New Zealand | 31 | 34 | 38 |
| Oceania | 14 | 15 | 20 |
| Europe and North America | 1120 | 1129 | 1125 |

(Source: United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects: The 2022 Revision. New York: United Nations) [24].

It should be added that the UN medium projection expects the world population peak to happen in the 2080s at some 10.4 billion. Furthermore, the UN expects that the population size of the African continent will be close to the population of the Asian continent by the year 2100: 3.92 billion vs. 4.68 billion [24]. China's one-child policy was changed to a two-child policy in 2015 and was completely abandoned in 2021. The strong economic development in combination with labor-market ambitions and strong self-confidence among well-educated Chinese women may have accelerated the development. The Chinese population seems to peak in 2022 at the level of about 1.425 billion inhabitants and is expected to decrease throughout the century [26].

This year India, now with about 1.429 billion, has overtaken China as the country with the biggest population in the world. Most Indian states already have low fertility, but their populations will grow for some time yet due to demographic momentum, and in some cases, interstate migration. Nevertheless, some Indian states and territories still have high fertility, which prevents these states from having the same rapid economic development as the most economically successful Indian states (in which fertility is now comparatively low) [27].

The slowing and reversal of population growth in China and India have a strong checking impact on global population growth. These two giants represent a total of almost 3 billion people. The sources of a continued annual world population increase of about 80 million per year are to be found elsewhere, mainly in Africa, but also in the Middle East and in Asian countries such as Pakistan and Afghanistan [24].

At the same time, research presented at UN conferences on biodiversity and threatened species shows an alarming development. Almost 1 million species have disappeared or are seriously threatened [28]. Human activities seem to be the reason for this disastrous development. These human activities include phenomena like the expansion of cities, the building of large infrastructure, cutting rainforests for timber harvesting and agricultural expansion, wildlife poaching and others. The large-scale fishing industry is vacuum-cleaning the seas and oceans but poor farming families are also contributing through clearing forests and other natural habitats in a desperate search for food, fuel or arable land when desertification is threatening their existence. Human activities have driven wildlife from its home and destroyed irreplaceable ecosystems [29].

Apart from a brief lull in greenhouse gas emissions, all these negative trends have been strengthened by more than two years of the COVID-19 pandemic. People in less developed countries experienced setbacks in economic security and reproductive rights. Through very drastic lockdown measures all over the world, millions lost their jobs. Schools were closed and, in the poorer sections of populations, children had to go begging while young girls were forced to marry at an even younger age than before [30]. When the pandemic seemed to be over in February 2022, Russian President Vladimir Putin decided to invade Ukraine, with (inter alia) disastrous consequences for the necessary grain exports from one

of the world's "bread baskets"—Ukraine. Today the number of extremely hungry persons is almost 350 million [31].

This dramatic situation should normally encourage the international community to take very radical steps in delivering both emergency and development assistance to the many affected countries. However, the Russia–Ukraine war is leading to considerable reallocations of financial resources from (the already low) official development assistance (ODA) to supporting the Ukrainians in their fight for independence, freedom and democracy. International solidarity seems to have its limits [32].

Climate change is poised to intensify all these challenges. Greenhouse gases already far exceed levels previously seen throughout human history (Figure 2). The year 2023 is breaking many records in terms of high temperatures, forest fires, extreme drought and disastrous floods [33,34]. We are in the middle of radical climate changes, the physical, social, economic and human consequences of which are becoming insurmountable for many countries. In a world already straining to accommodate rapidly growing numbers of refugees and asylum-seekers, we face the prospect of adding many millions of climate refugees [35].

Global atmospheric CO₂ concentration

Atmospheric carbon dioxide (CO₂) concentration is measured in parts per million (ppm). Long-term trends in CO₂ concentrations can be measured at high-resolution using preserved air samples from ice cores.

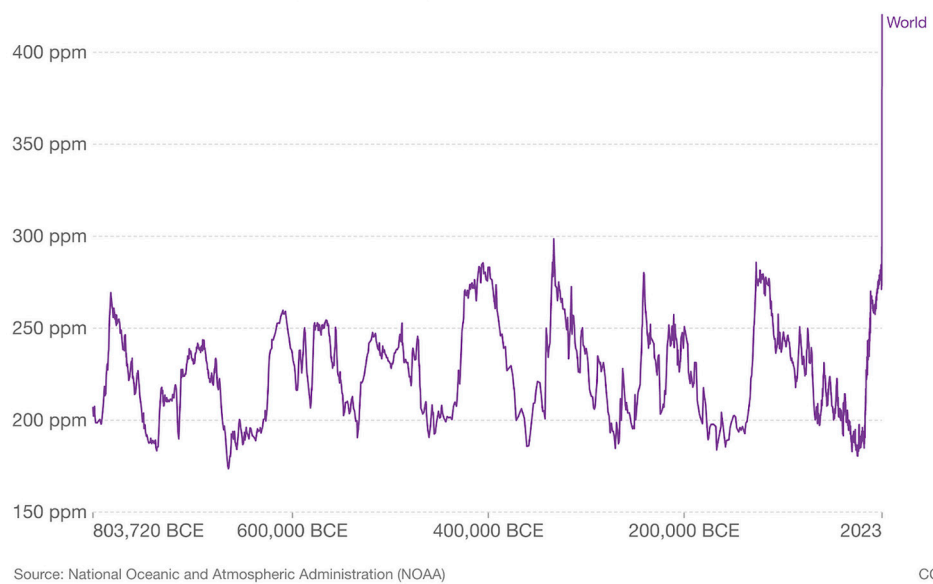


Figure 2. Atmospheric concentration of carbon dioxide since 800,000 BC. Source: Our World In Data [36].

When comparing Figures 1 and 2, it becomes obvious how instrumental the industrial revolution of the 19th century was in the history of the planet and its inhabitants.

3. The Case of Africa

Correctly, the African continent is often characterized as "the continent of the future". However, this sentiment is frequently founded on the very questionable belief that the doubling of the African population during the 21st century will be a blessing for the continent and for the world. All experience demonstrates that such a radical population increase is a curse rather than a blessing [37]. Already, several African countries are experiencing increasing levels of food insecurity and even being threatened with famines. Africa's considerable natural resources could be developed with a greater share of benefits going to the African people rather than to multinational corporations, but whatever benefit each African receives will be smaller, the more Africans there are. From a *business* point of

view, the African market is already very promising. The big cities are growing, the middle class is expanding and the market demand for cars, technology and other products from the abundance of the industrialized world is increasing by the month [38]. Through trade and foreign investments, some African cities are on their way to becoming almost as big CO₂ polluters as European or Chinese cities.

Today (2023), Africa seems to be the only continent where a “Malthusian” situation is prevailing. Most parts of the world have been harvesting the results of the “green revolution” in the second half of the 20th century. As a result, food production is sufficient, although it is not ecologically sustainable in the long term [39]. However, African food productivity is low, the capacity for distribution of food is insufficient and population pressure is leading to further land degradation [40]. Already, large parts of the continent are dependent on food imports or food aid, while population pressure is degrading agricultural capacity [41]. Africa’s food security is worsening rapidly, due to a greater extent to population growth than to climate change [42].

The extremely high fertility in many African countries is often presented by politicians as a big asset and a competitive advantage. “A young population is a guarantee for the future” [43]. But the huge numbers of young people are creating problems. In reality, few societies can offer labor opportunities for so many young people [44]. Poorer families are finding it difficult to feed the fourth, fifth or sixth child. The gap between the living standards of urban middle-class families (with fewer children) and poor families (with many children) is growing. It becomes a vicious circle. Poor families cannot afford their daughters to attend many years of schooling. Therefore, the tradition arises that 13–14-year-old girls drop out of school, marry and start giving birth [30]. Such an early start often leads to six or seven children before the mother reaches the age of 30 (Table 2).

Table 2. Fertility in some African countries: TFR = total fertility rate, number of live births per woman.

| Country | TFR |
|---------------------------|------|
| Congo (Dem. Rep.) | 5.96 |
| Mali | 5.92 |
| Niger | 7.15 |
| Nigeria | 5.41 |
| Somalia | 6.12 |
| African fertility average | 4.5 |

Source: UNFPA 2022.

It is estimated that, globally, 650 million women who are married today have married at a very young age, below 16 [45]. A majority of these women is African.

The argument that large families are “a guarantee for the future” is not valid anymore. Although there is still much room for improvement, child mortality has fallen, even in the poorest African countries, from more than 1 in 3 in 1950 to rarely more than 1 in 10 today, with an African average around 1 in 15 [24]. But the tradition of having many children as a kind of security arrangement (if one or two children die) seems to remain in many people’s mind. This attitude in combination with a strong “macho culture” seems to prevent young African women and girls from making their own life choices [46,47].

Similar patriarchal influences can be found in other countries, such as Afghanistan and Pakistan, or in wartorn countries like Syria or Yemen. Interestingly, the situation in the Islamic Republic of Iran is completely different. In spite of the notorious regime of the mullahs, women in Iran are well educated and have their own agency. In 2023, they had a fertility of around two. Iran’s family planning program changed cultural attitudes, allowing women to control their own fertility and their lives and encouraging parents to invest in the quality of their children’s education and upbringing rather than in the quantity of children [48].

4. How Many People Can the World Support?

As mentioned above, many “population optimists” tend to forget that people are running down the planet’s resources. The richer we are, the more we consume and exploit the limited resources of the planet. The American scientists Ehrlich and Holdren have created the classical so-called *IPAT-formula* [49]:

$$\text{Impact} = \text{Population} \times \text{Affluence} \times \text{Technology}$$

The consequence of this simple formula is of course that the richer world, now also including China and parts of India, is by far the biggest polluter. But, as stated above, big cities in the developing world are now also becoming big polluters and, frankly, who wants to deny the peoples in poorer countries the chance to develop more affluence and technology?

The sad fact is that for many years human beings have been over-exploiting the resources of the Earth. Since we have only one planet, this cannot continue forever. The famous ecological footprint model created by Rees and Wackernagel [50] illustrates the global dilemma very clearly (Table 3).

Table 3. Ecological footprint of consumption per person: estimates by Global Footprint Network for the year 2019, expressed in “global hectares” of standardized productivity [51].

| | |
|--------------------------|---------------------|
| Earth can take: | 1.6 hectares/person |
| But the footprint today: | 2.6 hectares/person |
| Bangladeshi footprint: | 0.7 hectares/person |
| Swede’s footprint: | 5.5 hectares/person |
| US-American footprint: | 7.8 hectares/person |
| China’s footprint: | 3.5 hectares/person |

The footprint table reminds us that a Western lifestyle, when multiplied by the current world population, has devastating effects on global ecosystems and on the sustainability of the planet’s resources. According to Global Footprint Network’s calculations, Earth Overshoot Day is the day on which humanity has used an entire year’s worth of global biocapacity and spends the rest of the year drawing down reserves. In 2023, this threshold was reached on 2 August. Scientists seem already to be in agreement that the Western lifestyle needs to be radically moderated [21]. An economic model should not be based on growth and short-term profit at the expense of vulnerable people and the security of future generations. We cannot have infinite growth on a finite planet. The table also gives us a hint of what will happen when more countries reach a higher level of development, including resource exploitation. We all wish developing countries to develop, but in the long run the only way of avoiding a disastrous impact on the environment and climate is to reduce the population element in the IPAT equation.

The Paris Conference on the Climate in 2015 took some pride in defining necessary measures in reducing CO₂ emissions and proposing timetables [52]. However, the conference discussed neither the consequences of dramatically increased meat production nor the impact of the rapid world population growth.

Egypt hosted a new conference in Sharm El Sheikh in 2022 [53]. This conference was considered successful because finally a decision was taken to create a Compensation Fund for Developing Countries that embark on CO₂-reduction measures. However, given the above-mentioned negative trend in ODA, it remains to be seen to what extent this decision will be fully implemented.

The conference did not discuss the population aspect.

It should be added that there are also strong *economic arguments* in favor of radical measures to save the climate. The World Bank has calculated that the costs of ecosystem collapse would be USD 2.7 trillion per year by 2030 [54].

5. The Opposition against Active Population Policies

As mentioned above, many governments and lobbies started to oppose an active population policy in the 1980s. This opposition had different reasons and came from different parts of the world. However, the different opponents seemed to create an “unholy alliance” in time for the Cairo Conference in 1994. Here are some of the members of this “alliance”:

- Development assistance executives, including from civil society organizations, who wanted to distance themselves from the Chinese type “authoritarian methods of birth control” and who felt obliged to avoid measures that could be seen as patronizing administrations of developing countries [55].
- Technology optimists saying that humanity will, as always, find solutions to new challenges [56]. According to them, the planet can easily house 10–12 billion people if not many more.
- Some women’s organizations who felt that “birth control” programs constituted neo-colonialist efforts to tell women in developing countries how to organize their lives [57].
- Evangelicals and similar radical Christian groups who, “in the Name of God”, were actively fighting against abortion and other family planning measures. These groups had a very strong influence on Republican Presidents of the USA, from Ronald Reagan, through George Bush and George W. Bush to Donald Trump. These Republican Presidents stopped American financial contributions to the UNFPA [58,59].
- Islamic States and other states with a Muslim population became ever more active opponents of family planning as representing cultural Westernization. These governments did not want population policies to encourage the empowerment of women, including her right to decide over her own body [60].
- The Vatican and the Catholic Church affirmed their opposition to modern contraception in the 1968 papal encyclical *Humanae Vitae*. To retreat from this position would require a retreat from the doctrine of papal infallibility [61]. The Vatican has used its considerable influence within the United Nations and elsewhere not only to oppose contraception and abortion care but also to undermine the idea that population growth may have negative consequences, thereby justifying family planning promotion [62].

The above groups represent a significant proportion of world power. Their opposition has had very strong effects on global population policy in the past 40 years.

Added to this, some political leaders consider it to be their duty to encourage women to have more children in order to make their country, or their ethnic group within a country, more powerful and respected [63,64].

Religious opposition against an active population policy is particularly powerful. Around the year 1980, the world experienced a sensational religious renaissance. The charismatic and politically skilled Pope John Paul II had recently been installed in Rome. Ayatollah Khomeini became the theocratic leader in Iran (inspiring and radicalizing many young Muslims worldwide). The radical Evangelicals became the main supporters of the USA’s Republican Party, which retreated from a position of world leadership on family planning support under the Nixon and Ford governments to antagonism toward reproductive freedoms and the UNFPA under Reagan and subsequent Republican presidents [62,65].

These religious movements have attracted many followers in developing countries, particularly in Africa. Various Christian believers represent some 62 percent of the Sub-Saharan African population. Muslim believers represent some 32 percent, mainly in West Africa [66]. In many countries, for instance in Nigeria, Christians and Muslims are in conflict. But they seem to take a common conservative standpoint with regard to women’s roles and family values, and both fear the other group out-breeding them and asserting political dominance. Both the Bible and the Quran are used in a widespread opposition against active population policy in African countries. This conservatism is dominating many countries of the continent. Its focus is not only on opposing women’s

rights. Homosexuality and other aspects of LGBTQ are persecuted, for instance in Uganda where homosexuality is punished with the death penalty [67].

6. The European Population Experience

By the end of the 19th century, fertility in many European countries was very high, an average of 4.5, but often more than seven or eight children per woman [68]. Poor families suffered, women died in childbirth or through crude abortion efforts and newborn babies were killed or hidden. The social and economic situation for many poor families was dramatic. There seemed to be little hope for the future. The dark situation contributed to large-scale European emigration to the USA.

So, how was the difficult European situation remedied in the 20th century in spite of two disastrous World Wars and despite an Iron Curtain dividing the continent for more than 40 years?

It was possible only through ambitious social welfare reforms. These reforms included improved rights for women, with full education and literacy for all, with information on the use of contraceptives and with an increased female participation in the labor market [69]. A certain “population balance” could arise on both sides of the Iron Curtain and fertility rates eventually declined to the present situation where it is below two in every European state [70].

One reason why European population growth was successfully balanced in the 20th century was that “the conventional wisdom” in European societies (except in dictatorships such as Nazi Germany and Romania) considered that society as a whole as well as individual families would be better off with a moderate number of children. With lower population growth, employment prospects improved, urban slums gave way to better housing and welfare systems could be more generous to the fewer needy people.

Another important contribution to the European success story was the first and second “female revolutions”.

The first female revolution was the successful fight for female suffrage. This fight led to the right to the vote in most European countries shortly after World War 1.

The second female revolution had the French author Simone de Beauvoir as its leading figure. She created the ideological superstructure for a breakthrough in women’s rights in many fields [71]. The introduction of the contraceptive pill in 1964 was symbolic of these successes, giving women the chance to control birth. Around 1980, the number of female politicians in parliaments and as political leaders began to increase dramatically. The first UN Women’s Conference was held in Copenhagen in 1980 [72]. Women started joining the armed forces in many countries and the International Football Federation, FIFA, finally lifted its curious ban on women’s football (in 1971).

It should be added that Europe during most of the 20th century was increasingly characterized by *secular* societies. The emphasis was on *social* development. The French economist Thomas Piketty has established that both income and wealth gaps between the rich and the poor were reduced considerably in the period 1910–1980 [73]. “Social engineering” and “welfare for all” were priorities, for communists, socialists, social democrats and liberals alike. Church attendance declined dramatically. More Europeans took advice on life decisions from the medical doctor or the teacher rather than from the priest.

With “hyperglobalization” which, like the global religious renaissance, developed from around 1980, social and economic gaps started widening again, including in Europe. But the low fertility rates were now established, not least through high education and employment participation for women. Hence, these rates are not likely to rise substantially in the future.

European Demography Crisis?

The low fertility and birth rates in Europe have raised considerable attention in the media in recent years. “A European demographic crisis” has become a popular theme of various in-depth articles [74]. Similar alarm signals are coming from China, Japan and South

Korea. The tenor of the articles is about the rapidly ageing population and the question asked is “who will take care of the old people, when there are so few young people?”

However, the descriptions of a “European demographic crisis” do not seem fully to take into account that workforce participation is higher than ever, especially among women and older workers, who are retiring later. Life expectancy has increased by several years in recent times and many people above age 65 are fully fit, very active and willing to work.

The growing number of elderly people may pose some challenges but it is a minor problem in comparison with the challenge of creating jobs or offering hope for the future to young boys and girls in grossly overpopulated parts of the world. This challenge is the *Real Demographic Crisis*.

7. The Challenges of Over-Population and Possible Solutions

If we seriously want to avoid even more serious climate disasters than we are already experiencing, we most likely have to reduce all three elements in the IPAT formula: *Population, Affluence and Technology* [49]. Ironically, the reduction in the population-growth element is the easiest to achieve. We know that, according to the UNFPA, more than 250 million women want to avoid pregnancy but are not using effective contraception [75], a number that has not reduced in 35 years [76]. The cost of reaching all 1.9 billion women of child-bearing age and providing them with the desired services has been estimated at about USD 12.6 billion per year—a ridiculously low figure in comparison with various international expenditures today, and one that is immediately repaid three times over in savings on health services for unwanted pregnancies [77].

Challenges

- **The Global Challenge:** For the sake of climate stabilization, an active population policy needs to be re-introduced, enshrining voluntary, client-focused and rights-based family planning services as central to sustainable development. There are good role models. The successful programs of the 1970s and 1980s are well documented [78]. Without these programs, the world population would have been close to 9 billion today! The UNFPA needs a larger budget [77]. Many bilateral ODA donors would need new priorities and various civil society donors should follow the example of the *Bill and Melinda Gates Foundation* in supporting voluntary family planning provision [79].
- **The African Challenge:** Christian and Muslim leaders in Africa must be persuaded that a population policy is necessary. This will be difficult but has been done elsewhere. If unconvinced about the benefits for economic development, they may be motivated by increasingly evident risks of extreme food and water scarcity.
- **The National Challenge:** The chances for a prosperous society are much better if population growth is under control. South Korea’s and Europe’s sensational development in the past 50 years stands as an example. The argument sometimes used by certain authoritarian leaders (see above), “*Our population has to grow, in order to strengthen the power of our nation*”, must be rejected.
- **The Equality Challenge:** More just and equal conditions both within countries and between poorer and richer countries can be achieved only if more gender equality is also introduced in poorer countries. Education of girls through all three school levels is necessary. Dropping out from school at an early stage must be avoided. Child marriage must be stopped.
- **The Family Challenge:** Children should not be a burden on a family but for poorer families the feeding of too many hungry mouths becomes impossible. Parents (particularly fathers) must realize that large families no longer represent a “guarantee for the future” when infant mortality is now low and employment opportunities require investing in a child’s education.
- **The Child Challenge:** Every child in the world should have the right to be really wanted and welcome—to be loved by parents and family. Every child should also

have enough physical resources, at both the family and society level, for a chance to have a reasonably good life.

If the world community could agree on these minimum demands of a newborn child, we may see political and financial commitment restored for extending access to family planning services and information to all the world's people. If, in addition, the countries that already have low birth rates stop trying to encourage population growth and instead embrace the many advantages of population decline, humanity may yet avoid leaving a depleted and destabilized world to our great-grandchildren.

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