

PEER REVIEWED ARTICLE

Confronting the United Nations' pro-growth agenda: A call to reverse ecological overshoot

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Abstract

In this article, we enjoin the United Nations (UN) to forge a path out of our plight of multiple environmental and social crises. With other analysts, we identify 'overshoot' – the state in which humanity has substantially outpaced Earth's capacity to regenerate its natural systems and to absorb our waste output – as the root cause of the existential threats we face. This dangerous condition demands rethinking our relationship with Earth and embarking on scaling down the human enterprise within policy frameworks of equity and rights. We argue that when the UN first articulated its international unity and prosperity mission, it did so within a 'growth' paradigm that treats Earth and its nonhuman inhabitants as mere resources at humanity's disposal. The 1994 Cairo Conference on Population and Development reinforced this agenda, with its sharp turn away from the earlier emphasis on population concerns and their link to environmental protection. Today, it is clear that the UN's foundational goals of peace, human rights and sustainability flounder within a growth-driven framework of human exceptionalism and nature domination. To correct course and reverse our advanced state of ecological overshoot,

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we urge the UN to lead in contracting the large-scale variables of the human enterprise – population, economy, technosphere – and to resist co-optation by political, ideological and special interest pressures that would derail this mandate.

Keywords: ecological overshoot, human exceptionalism, pronatalism, degrowth, United Nations, human rights, ecological justice

Introduction

The United Nations (UN) was created in 1945 with the historic pledge to uphold world peace and serve as an institutional setting for collaboration among all nations. Eighty years later, we find ourselves in the midst of multiple social and ecological crises. These dire and mounting threats stem from our advanced condition of overshoot, which describes our predicament wherein the growth of the global economy has substantially outpaced the capacity of Earth's natural systems – marine, forest, grasslands, wetlands, freshwater, soils – to process human waste output and regenerate their ecological wealth and biodiversity (Rees, 2023).

The UN emerged from prevailing ideas at the time of its founding, including that endless economic growth brings prosperity and wellbeing, that human ingenuity can overcome all constraints to growth, and that nature and nonhumans exist as 'resources' to serve us (Kuhleemann, 2020). While these ideas have directly led to the present-day cascading crises, the UN appears invested in their obsolete framing even as circumstances are becoming more desperate.

Since the mid-twentieth century, the expansion of the human enterprise has accelerated on a number of interconnected levels: growth of economic extraction, production and trade; increased consumption and higher standards of living (for some); increasing energy use; a growing global consumer population; enormous growth of the food sector; relentless technological (including infrastructural) sprawl; and exponential increase of the human population and the global livestock population (Steffen et al., 2015; Rees, 2023). (The combined latter populations now comprise 96 per cent of mammalian biomass [Bar-On et al., 2018]). Meanwhile, a 2020 *Science* publication offered a sobering quantification of technospheric growth (Stokstad, 2020). While 120 years ago the mass of the

technosphere (the total amount of man-made stuff) was three per cent of Earth's biomass, by 2020 the technosphere exceeded the weight of all living beings. By 2040, the mass of human stuff is projected to grow to three times the planet's biomass. Briefly put, the industrial technosphere, serving eight billion people connected within a global capitalist system, is overtaking the planet.

What we have learned is that this explosion of growth, at breakneck speed, is a recipe for climate breakdown, mass extinction and global toxification, destabilising all complex life and undermining humanity's prospects for high-quality living and even for survival (Ripple et al., 2017; DellaSala et al., 2018; Díaz et al., 2019; Ceballos et al., 2020; Bradshaw et al., 2021; Rees, 2023).

In this article, we argue that the UN needs to reassess its growth-biased orientation and extricate itself from the corporate and religious interests that are undermining its professed goals of peace, prosperity and stability. We include a brief review of the UN's history, including its departure, under the influence of these interests, from acknowledging and addressing the ecological harms of unmitigated demographic and economic growth. We outline a path toward correcting our advanced state of ecological overshoot, beginning with resurrecting leadership on reducing the global population through rights-based approaches. In addition, we urge the UN to acknowledge and part ways with its human-exceptionalist approaches that treat nature and nonhuman beings as resources for human exploitation, approaches that have ripped the fabric of Earth's life-sustaining biophysical systems. In addition to offering counsel on population reduction strategies, we present current literature on pathways to contracting our economic excesses with attention to equity and justice.

Confronting ecological overshoot

If the nineteenth and twentieth centuries were the centuries of 'progress', wherein material prosperity and technological advancement appeared within reach of all humanity, the twenty-first century and beyond are the time of reckoning with the ignored externalities and consequences of this progress. Overshoot is the engine of an anthropogenic mass extinction event that recent scientific reports warn is accelerating (Steffen et al., 2015; Díaz et al., 2019; Ceballos et al., 2020; Rees, 2023). Overshoot also undermines nature's capacity to mitigate climate change on a double register: human-driven global heating releases carbon stored in Earth's

ecosystems and soils, while continued destructive incursions into ecosystems weaken their capacity to absorb emissions (Steffen et al., 2018).

Alongside the perils of ecological drawdown and rapid climate change, overshoot of industrial humanity is also driving environmental contamination from local to global scales. Earth's biosphere may be likened to a thin film of life encompassing the planet and extending a few kilometres into crust and atmosphere. This finite envelope, within which all life exists in a relatively closed system, is increasingly besieged by toxic substances like plastics, fertilisers, pesticides, herbicides, heavy metals, industrial chemicals and pharmaceutical waste (DellaSala et al., 2018). The mounting pollution and degradation of the biosphere are attenuating the epidemiological environment of life, promoting conditions for infectious, zoonotic and chronic disease to spread (Ehrlich and Ehrlich, 2013).

A further dangerous outgrowth of overshoot is its potential to fuel conflict. Overshoot induces growing scarcities, dislocation of populations, disruption of supply chains, adverse harvest events and freshwater depletion and pollution (Klare, 2014; Bradshaw et al., 2021).

In brief, overshoot is the underlying driver of climate breakdown, biodiversity collapse, global toxification and aggravation of social conflicts and war. This predicament lowers the quality of life of present and future people, has a corrosive influence on democratic institutions, presents opportunity for dangerous demagogues and tyrants and reduces the capacity of young people to believe in a bright future. The accelerating condition of overshoot – the outcome of too many people having (or desiring) a high consumption standard of living, in a polluted world of declining 'resources' – tends to foster divisive and fear-driven socio-psychological states. Overshoot makes humanity far less conducive to the noble inclinations of human nature, like sharing, collaborating and equitably coexisting (Rieder, 2024).

It is clear that we must act as an international community, with meaningful contributions from UN leadership, to confront the root cause of our plight while there is still time to be proactive. The called-for programme of action is audacious in scope but simple to articulate: there must be fewer of us, extracting, producing and consuming less, and living far more equitably within the entire

community of life (Jackson and Jensen, 2022; Fletcher, et al., 2024). At our stage of advanced overshoot, this programme of action is mandatory simply for survival and prevention of unnecessary death and suffering. Importantly, it also lays the groundwork for a world underpinned by a planetary reality where biodiversity and its ecological gifts are restored to their abundances, complexity and resilience, and there are enough sources of livelihood for all to enjoy a simple but high-quality standard of living.

In sum, countermanding overshoot with the goal of fewer of us, consuming less, with a commitment to equity, is about more than survival. It promises a redirection of human history away from the modalities of conquest, colonisation, exploitation, killing, conflict, war between humans and what UN Secretary General Antonio Guterres has called 'our suicidal war on nature' (UN, 2021b).

The UN's early population efforts

Earlier in the UN's history, the institution embraced the necessity of addressing population and played a pivotal role in focusing international attention in rights-based efforts to lower fertility. In the years following the UN's creation, demographic studies elucidated the realities of unprecedented population growth that were undermining efforts at peacekeeping and instituting human rights. In collaboration with the International Union for the Scientific Study of Population (IUSSP), the UN convened its first world population conferences in 1954 (Rome) and 1965 (Belgrade) to discuss solutions to challenges related to population growth. What followed was an extraordinary period of international investment in rights-based programmes, including education for women and girls and publicly funded family planning programmes. These approaches brought tremendous gains in lowered fertility, reduced poverty and enhanced autonomy for women and girls (DeJong, 2000; Weisman, 2013; de Silva and Tenreyro, 2017; Kuhlemann, 2020; Bongaarts and Hodgson, 2022).

The UN's 1994 Cairo conference: population concerns abandoned

Yet in the population conferences held in the decades that followed, namely 1974 (Bucharest) and 1984 (Mexico City), this spirit of frankly acknowledging and addressing population challenges began to shift (DeJong, 2000; Coole, 2021). By the 1990s, the subject had become so contentious that the 1994 International Conference on Population and Development in Cairo, Egypt culminated with

an abrupt departure from acknowledging the role of population deceleration in promoting ecological sustainability and human rights. Feminist and social justice advocates, religious conservatives, and trade and economic interests united to delegitimise population concerns brought forth by demographers, family planning advocates and environmentalists at the Cairo conference (DeJong, 2000; Campbell and Bedford, 2009; Weisman, 2013; Kuhlemann, 2020; Coole, 2021; Bongaarts and Hodgson, 2022). A key factor in this ideological turn was the ascension of the New Right in the United States, as the Reagan Administration conjoined neoliberal economics and social-religious conservatism. Buttressed by the conviction that human population increase was necessary for economic growth, the powerful proponents of this emerging ideology rejected state-level protectionist and welfare support, including for family planning initiatives that they branded 'neo-Malthusian'. In their formulation, opening markets for trade would itself lower fertility as it propelled development, with no need for direct investment in family planning (DeJong, 2000; Coole, 2021). Professed concern for the vulnerable notwithstanding, the motive for shifting toward a free trade emphasis was the drive by elites in both the developing and developed world to exploit developing nations' cheap resources (Shrivastava and Kothari, 2012; Coole, 2021).

The presence of the Vatican and other conservative religious interests at Cairo, and their vociferous opposition to birth control and abortion, cemented the shift away from voluntary family planning policies and female empowerment as pathways to reduced fertility rates, higher quality of life and nature protection (DeJong, 2000; Coole, 2021; Bongaarts and Hodgson, 2022). Ultimately, due to the presence of a constellation of interests that were for their own reasons hostile to family planning, the Cairo conference became the death knell for an understanding that a sustainable population and the elevation of human rights could be *twin goals* for achieving reproductive and ecological justice. Feminists, concerned by instances of 'population control' efforts that had included coercive measures, joined trade and religious advocates in upholding this newfangled population denialism, despite the fact that the vast majority of family planning initiatives over preceding decades were *voluntary* and indisputably elevated women's reproductive rights and improved the quality of human life (Robinson and Ross, 2007; Weisman, 2013; de Silva and Tenreyro, 2017; Coole, 2021; Bongaarts and Hodgson, 2022).

The aftermath of the UN's 1994 Cairo conference

The consequences have been devastating. In the decades since the 1994 Cairo conference, international funding for family planning plummeted by 35 per cent, and it continues to fall far short of the global unmet need for contraception (Sinding, 2008; Grollman et al., 2018). The result has been the stalling, or even reversal, of fertility declines in many countries experiencing rapid population growth (Bongaarts and Hodgson, 2022).

What the reproductive-rights community, including many feminists, missed in this historical moment was the enormous sway of pronatalism, a coercive population-growth factor far more prevalent than any 'population control' measures employed to lower fertility (Campbell and Bedford, 2009; Kuhlemann, 2020; Coole, 2021; Bajaj and Stade, 2023). Pronatalism is a constellation of patriarchal, religious, nationalistic and economic pressures on women to bear children, precisely in order to strengthen those power structures. Pronatalism emerged as institutionalised patriarchy came to prevail with the rise some 5,000 years ago of early states and empires that depended on population expansion and seizure of resources to consolidate power (Saini, 2023). It remains enormously pervasive and oppressive in the lives of girls and women and continues to be the steadfast engine of population growth.

With the ideological turn away from population concerns instigated three decades ago, pronatalism has been allowed to thrive in the obfuscation spawned by a superficial view of human and reproductive rights. The emergent discourse about family planning privileged the ostensible 'right of parents' to procreate, overlooking both the sociocultural coercive pressures on girls and women to bear children and the rights of children to be born into social and ecological conditions that are conducive to their wellbeing (Hedberg, 2020; Kuhlemann, 2020; Rieder, 2024). Additionally, the abandonment of the population factor meant that its undeniable relevance to safeguarding the natural world and future generations went missing from the public domain and international policy (Kuhlemann, 2020; Coole, 2021).

UNFPA population denial today: 2023 State of World Population Report

To this day, the ties of population size and growth to ecological and human wellbeing remain a largely proscribed subject within the UN, as reflected in the 2023 State of World Population (SWOP) report by the United Nations Population

Fund (UNFPA). The SWOP report demonstrates how the agency's extreme reluctance to address the population factor has resulted in messaging that excludes the impact of demographic realities on women, girls, ecosystems and vulnerable human communities. Its glib title, '8 Billion Lives, Infinite Possibilities', suggests a strong disinclination for a nuanced discussion of the challenges posed by population growth (UNFPA, 2023).

The report dismisses numerous studies by reputable scientists that draw conclusive links between growth in human numbers and climate breakdown, biodiversity loss, species extinctions, resource scarcity, conflict, poverty, food insecurity and more, labelling those studies 'modern Malthusianism' – a term popularised by the pro-growth and religious right movement of the 1980s (DeJong, 2000; Coole, 2021). Instead of conceding the obvious role of human numbers in these compounding crises, and the environmental and social benefits that would accrue from fewer people, the report vaguely alludes to 'reducing emissions' and 'increasing sustainable production and consumption' as strategies to address climate change, while leaving virtually unacknowledged that climate change is but one existential threat out of many in our state of overshoot.

The report goes so far as to deny outright the relevance of population size, citing a statement from the Union of Concerned Scientists that, 'A misplaced focus on population growth as a key driver of... climate change conflates a rise in emissions with an increase in people, rather than... an increase in cars, power plants, airplanes, industries, buildings' (UCS, 2022 as cited in UNFPA, 2023). The implication here is that the technology and infrastructures that produce climate-wrecking emissions are wielded solely by a consumer minority residing in wealthy, low-fertility countries. This view entirely discounts the global reality of a rising middle class that is responsible for all that technology and infrastructures – a global consumer class that is projected to reach five billion within this decade alone (Kharas, 2017). The report's view appears to assume that the billions of people living in poverty today will not seek to improve their standard of living and thus increase their share in 'cars, power plants, airplanes, industries, buildings' (see Rees, 2023). Meanwhile, the ignored science behind the UN-sponsored IPCC report conclusively shows that, 'Globally, GDP per capita *and* population growth remained the strongest drivers of CO₂ emissions from fossil fuel combustion in the last decade' (IPCC, 2022a, emphasis added).

SWOP 2023 ignores pronatalist pressures

UNFPA's refusal to consider the population factor is based on its contention that to do so places responsibility for the climate and other global crises on women and girls, thus 'weaponizing ... women's rights to contraception and education'. What the report elides, however, is that these very rights are violated by pronatalist pressures worldwide: women and girls regularly face domestic violence, sexual abuse, divorce, economic marginalisation and social ostracism as a result of their inability or refusal to have the number of children dictated by high-fertility societal norms (Dasgupta and Dasgupta, 2017; Ikeke, 2021; Ullah et al., 2021; Bajaj, 2023; Pirnia et al., 2023).

Pronatalist pressures are only worsening, with numerous countries spreading alarmist rhetoric about 'human population collapse' to justify policies ranging from baby bonuses and legally reduced marital age, to restricting abortion and contraception, and even subsidising the multi-billion dollar assisted reproductive technologies industry (Bajaj and Stade, 2023; Fassbender et al., 2023). As admitted in the report, these pronatalist policies and narratives often include ethnocentric, anti-immigration and nationalist rhetoric that advance elitist, political and economic agendas as well as religious and racist ones (UN DESA, 2021; UNFPA, 2023). These rising pronatalist trends constitute an enormous regression of hard-won human rights. Taking concrete steps to oppose them should be a priority for the UN and other bodies concerned with strengthening reproductive rights. Yet UNFPA gives only passing attention to these emergent trends, prioritising their insistence that population size and growth bear no relevance to nature protection or human rights and wellbeing (Bajaj, 2023).

Ironically, realistic acknowledgment of how demographic trends fuel major social and ecological challenges would in no way interfere with the UNFPA's stated priority of strengthening female rights and autonomy. Across the world, in country after country, once women achieve the education, empowerment and means to plan their families, fertility declines. This trend is so strikingly uniform across religious, cultural and political contexts that it has revealed women's 'latent desire' for lower fertility – a general preference that surfaces forthrightly once conditions for women's authentic choices align (Robinson and Ross, 2007; Campbell and Bedford, 2009; Weisman, 2013; Engelman, 2016; Bongaarts and Hodgson, 2022; Speidel and O'Sullivan, 2023). Providing the means for women to control their

fertility, while also providing science-based information about how procreation relates to climate, biodiversity, clean water and other environmental concerns, will support women to realise their latent desire for fewer, well-cared-for children and also support their decision, if they so choose, to remain childfree. Such a shift toward female empowerment would correct for millennia of patriarchal pronatalism that has pressured women to be breeding machines.

The assumption that women should be spared accurate information about population impacts – lest they plan their families based on a comprehensive picture of the consequences not only for themselves but for present and future societies, for children and for the planet – is condescending (Hedberg, 2020; Rieder, 2024). The report repeatedly invokes the 1994 Cairo Conference Programme of Action, which lists as a core principle that all people have ‘the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so’ (UN, 1994). Yet a comprehensive picture regarding the impacts of reproductive decisions on the prospective parents themselves, as well as on the children, society and planet, is *precisely* what would enable reproductive decisions to be ‘free and responsible’. The SWOP report assumes that only would-be parents have ‘rights’, that they make decisions in a sociocultural and ecological vacuum, that the coercion of girls and women to procreate is irrelevant, and that ecological impacts of reproductive decision-making at local and global scales are discountable.

Refusal to admit the enormous implications of population size and growth suggests that the UNFPA espouses the pronatalist forces it turns a blind eye to (Bajaj, 2023). Despite passing mention of the influence of pronatalist pressures, the report assumes motherhood to be women’s desired ‘natural’ path, and reinforces this assumption with examples of remorseful women foregoing motherhood because of the climate crisis, or through selected studies highlighting involuntary childlessness due to infertility or other circumstances.

We agree that experiences of missed motherhood, and a sense of grief that may accompany them, need to be acknowledged. Absent from the report, however, is appreciation of the extent to which such experiences are shaped by oppressive forces, which stigmatise those facing infertility and insist on biological motherhood as the expected, default path (Greil et al., 2011; Ullah

et al., 2021; Pirnia et al., 2023). The report even casts a favourable light on state subsidisation of the fertility industry, while sweeping under the rug the ways in which this industry exploits socially constructed fears of childlessness, causes psychological and physical harms through aggressive interventions, and further entrenches biological-motherhood-is-destiny notions of womanhood (Tsigdinos, 2021; Turkmendag, 2022; Fassbender et al., 2023).

While extensively canvassing historic examples of forced sterilisation to control populations, the report makes no mention of the well-documented difficulties women face in obtaining voluntary sterilisation due to pronatalist medical institutions and state policies (Lalonde, 2018; Hintz and Brown, 2019). Instead of choosing to promote the predatory fertility industry, the report might have included discussion of people leading fulfilling lives as single and childfree adults, as well as within adoptive families or families created with nonhuman kin. Given the extent to which such choices are stigmatised within most cultures, normalising diverse family choices and hitherto nonconventional alternatives makes ethical and prudential sense (Neal and Neal, 2022; Bajaj and Stade, 2023). The report also missed a precious opportunity to elevate parenthood through adoption, which is a mindful choice for creating or enlarging families, especially given that millions of children worldwide are estimated to live in settings vulnerable to violence, abuse, neglect and exploitation, and are in need of loving homes (UNICEF, 2017; Hedberg, 2020; Rieder, 2024).

SWOP 2023 ignores the rights of children

Indeed, the most glaring oversight of a report devoted to reproduction matters was the omission of any mention, let alone discussion, of *the rights of children* to be born into conditions that support their material, psychological and spiritual wellbeing. This omission was especially reprehensible given recent reports that warn of the dangers to children's rights posed by population growth and climate change. A 2023 report by UNICEF and the World Bank notes that a combination of rapid population growth and limited social protection measures have led to a steep increase in the global numbers of extremely poor children, especially in Africa and South Asia where nearly ninety per cent of the world's children caught in extreme poverty reside (Salmeron Gomez et al., 2023). Yet another report warned that almost half of the world's 2.2 billion children are at risk of experiencing 'extremely dire' conditions from the climate crisis and pollution (UNICEF, 2021).

The convergence of poverty, rapid population growth and unjust cultural norms also fosters high rates of child marriage: Recent data from UNICEF indicate that more than 700 million women alive today were married before the age of eighteen, of whom 250 million were married before the age of fifteen (UNICEF, 2014). The practice of child marriage perpetrates the sexual abuse of girls and stunts their life prospects, while contributing to the spiral of population growth, poverty and high rates of morbidity, and stunting and early mortality among children born to these girls (Wodon et al., 2017). The relationship between population growth, high fertility and the violation of children's rights is especially stark in patriarchal societies. In sub-Saharan Africa, for example, due to population growth alone, a doubling in the number of child brides is projected by 2050 (UNICEF, 2014). Sub-Saharan Africa also has the highest prevalence and largest number of children in labour, representing over half of the 160 million total – another iniquitous trend projected to rise in lockstep with population growth over the coming decades (ILO and UNICEF, 2021).

Across the world, high fertility is directly jeopardising food security, the welfare of children and other vulnerable populations and ecological sustainability. The eight Millennium Development Goals (MDGs) endorsed by the majority of UN states in 2000 failed to achieve full realisation largely due to the refusal to address the population factor: Progress toward reducing child mortality, improving maternal health and securing universal access to voluntary family planning stalled or worsened as the global population grew by approximately another billion (Starbird et al., 2016). The Sustainable Development Goals (SDGs), signed by the global community in 2015 as an update to the MDGs and, like their precursor, based on the oxymoron of 'sustainable economic growth', missed the opportunity to adopt a meaningful commitment to correct this oversight. Today, the SDGs are also off track to reduce poverty and hunger, improve wellbeing and protect the environment (Kopnina, 2020a; UN, 2023).

As noted in UNFPA's own 2022 report, there is an unplanned pregnancy crisis, with half of all pregnancies, totalling 121 million each year globally, unintended (UNFPA, 2022). Other research shows that at least 270 million women globally have an unmet need for contraception due to patriarchal and religious barriers (Kantorová et al., 2020). Yet these crises are barely acknowledged in the report. At this historic juncture, this represents a fateful oversight. Instead of unpacking the

pronatalist pressures that thwart the realisation of human and nonhuman rights, and promoting a comprehensive ethic of reproductive responsibility to planet, children and future generations, the report offers the following hollow generalisation:

Support the fertility preferences and aspirations of people: understand whether people in all income categories, at all ages and in all social groups are having the number of children they want. If the answer is no, reproductive rights are compromised (UNFPA, 2023).

This statement not only ignores the rights of children to be born into a safe and caring world, it also naïvely overlooks the fact that expressed 'preferences' for numbers of children are socioculturally shaped, if not determined, and often rehearsing dominant patriarchal norms (Campbell and Bedford, 2009; Dasgupta and Dasgupta, 2017).

SWOP 2023 prioritises economic growth over human wellbeing

Despite the report's professed concern for the inalienable right of women 'to have the number of children they want', the humanity of the women doing the reproducing sometimes appears secondary to the reproductive function as such. While the report repeatedly denounces overpopulation discussions that 'transform... wombs into legitimate sites for climate policy', it has none of the same misgivings about rhetoric that sees wombs as engines of economic growth. The neoliberal wording of such statements as, 'Higher levels of human capital can offset environmental impacts while improving productivity and economic growth' frames human beings as system inputs, while whitewashing the devastating impacts of growth on nature, on children and on a human future worth living.

The priority that UNFPA places on economic growth is evident in the report's outdated assumption that such growth will automatically advance reproductive autonomy as well as fertility decline. This theory of demographic transition, as it is known, has been largely superseded (Robinson and Ross, 2007; Campbell et al., 2013; Bongaarts and Hodgson, 2022). A recent data analysis of 136 developing countries shows that falling fertility rates between 1970 and 2000 had little or no association with changes to national economies, whether measured by GDP or household consumption (Götmark and Andersson, 2022). Rather, falling fertility rates were a *direct* response to voluntary family planning programmes

that provided sexuality education, normalised contraceptive use and offered accessible and affordable services – regardless of whether economies grew, stagnated or declined. Yet the SWOP report makes no direct acknowledgement of the indispensable role family planning programmes play in the transition to lower fertility norms.

Dismissal of the population-environment connection is common to UN agencies

UNFPA is not the only UN agency that promotes conflicting messages on the connection between the human population and planetary health. While the 2022 IPCC climate-change mitigation report confirmed that population increase and economic growth are the main drivers of today's burgeoning emissions (IPCC, 2022a), those results were censored and removed from the Summary for Policymakers distributed to media outlets (IPCC, 2022b). What remained were only weak claims about the potential role of 'low-emission technologies' to mitigate climate change (IPCC, 2022b). Similarly, the latest UN Conference on Trade and Development report counsels developing countries to 'embrace green tech revolution or risk falling behind' (UNCTAD, 2023). This is disconcerting in light of recent studies that have demonstrated that reliance on so-called green technologies to reduce emissions while maintaining economic growth will not only be ineffective in countering climate breakdown, but will add more devastating impacts to our predicament (Rees, 2023).

Building these technologies at the scale needed to power current levels of economic development for a planet of eight billion, and growing, would itself require a massive ramp-up in fossil fuel consumption, as well as infrastructural buildout that destroys habitats and biodiversity. 'Green' technologies also demand mining for minerals found largely in the Global South, driving deforestation, toxification of soil and groundwater, poisoning of air, killing of wildlife, human displacement due to water scarcity and exploitative labour practices including of children (Jackson and Jensen, 2022; Kara, 2023; Ketcham, 2023). This new wave of industrial extractivism is already rapacious, but it must expand to accommodate continued population and economic growth: its next frontier is the deep seabed, the last ecosystem not yet assaulted by industrialism and which harbours rich and largely unknown biodiversity (Heffernan, 2019).

The 'clean energy transition' is poised to drive staggering assaults on a natural world already in the throes of a mass extinction. Yet that transition is excused and even celebrated with arguments that we must provide for an oversized and growing human population whose inevitability is seldom questioned. The same unquestioned commitment to growth underlies the UN's reluctance to consider reining in the most environmentally destructive aspect of humanity: the food system (Campbell et al., 2017; Crist, 2019; Benton et al., 2021). The UN's Food and Agriculture Organization (FAO)'s 2006 report 'Livestock's Long Shadow' exposed the significant contribution of greenhouse gases from animal agriculture, with the sector found to account for eighteen per cent of emissions (Steinfeld et al., 2006; Neslen, 2023). The report called for significantly reducing the scale of industrial animal agriculture to curb emissions.

But former officials at the FAO have disclosed that they received such intense backlash from the major meat-producing countries that FAO's senior leadership was forced to water down their scientific findings in subsequent publications (Neslen, 2023): the 2013 report identified the livestock sector as responsible for fourteen per cent of all climate emissions, while the 2023 model ratcheted the number down to eleven per cent. In the meantime, independent studies have found that livestock emissions could be as high as twenty per cent or even 28 per cent of the total (Twine, 2021; Xu et al., 2021). FAO data are a prime source for IPCC's climate modelling, which is clearly compromised by the interests of industrial animal agriculture and a UN body that refuses to challenge them (Neslen, 2023).

Permitting political and special interest interference within the UN, especially in today's state of emergency, demonstrates compromised institutional integrity, or even uncritical support of destructive industries. In a world in overshoot, the continued pursuit of growth is a perilous path, which perpetuates the neocolonial exploitation of disempowered people and nonhuman nature via syphoning resources from Global South to Global North and downgrading Earth's biodiversity and ecological wealth (Langan, 2018; Kopnina, 2020b; UN, 2021a). Given the UN's influence on global policymakers and the public, it must lead the way out of this terminal self-destruction and toward an ethic of living equitably within ecological boundaries (Jackson and Jensen, 2022). We urge the UN to face the reality that growth at the interconnected levels of human numbers, economic activity and technosphere is imperilling the biophysical integrity of Earth as well as human survival and quality of life.

A call for the UN to embrace and implement a new ethic of degrowth and justice

Humanity's recent historical experience has revealed that unremitting population and economic growth have devastated nature, depleted resources, fuelled intra-human and human-wildlife conflict and undermined humanity's tenure as conditions deteriorate. We must abandon the growth paradigm and willingly shrink the large-scale variables that underpin overshoot: lower our global population by means of policies that elevate human rights and responsibilities; reduce our economic activity within frameworks of equity, meaningful work and peace; and contain the technosphere from overtaking the face of the Earth.

Reduce population

Decades of research show that providing affordable and accessible family planning and contraceptive services to all, along with education and empowerment of women and liberation of girls from child marriage, are the fundamental human rights through which fertility declines. Lowering the population hinges on instituting these rights (Robinson and Ross, 2007; Bongaarts and Hodgson, 2022; Speidel and O'Sullivan, 2023). Concurrently, we need to confront the sociocultural forces of pronatalism that have held women (and men) captive to the idea that biological procreation is obligatory and that motherhood is destiny (Campbell and Bedford, 2009; Kuhlemann, 2020; Bajaj and Stadel, 2023). Reproductive norm-shifting programmes such as radio shows, soap operas and other cultural initiatives are key components of this overarching approach to combating pronatalism (Ryerson et al., 2022). This approach aims for reproductive liberation, where procreating becomes an authentic decision, choosing to be childfree will be an equally acceptable option and alternative ways of creating family – including adoption – are embraced. This freedom also opens the door to reproductive responsibility: promoting procreative choices that consider the individual rights and wellbeing not only of the parents, but also of the children to be born, human beings already in existence and nonhuman creatures within the entire web of life (Hedberg, 2020; Rieder, 2024).

The goal of a smaller human population is not about 'social engineering' or 'population control'. On the contrary, it is about understanding that there must be fewer of us so that the fundamental needs of human life – most especially food, but also freshwater, housing, basic commodities, energy and infrastructures – cease to devastate land and seas. Today, humanity demands *half* of Earth's

ice-free surface to make food while industrial fishing has devastated marine life abundances and habitats (Fletcher et al., 2024). How can UN agencies, and other constituencies, rationally claim that these life-shattering metrics have *nothing to do* with human numbers?

Reduce economic activity

Redressing how economic activity fuels overshoot is more complex, given economies' fundamental dependence on both biophysical reality and social structure. The complexity of economic-driven impact demands redirection on several economic variables simultaneously (Spash, 2024). We argue for a multipronged approach: reduce the workweek; eliminate the production of luxury, throwaway and planned obsolescence commodities; reduce global trade; shrink the materials- and energy-intensive global military sector; revamp the financial system away from debt and credit; and transform how we grow food and make dietary choices.

As an overarching mandate, we need to reduce industrial extraction, production, trade and consumption. Lowering our numbers will facilitate such economic downscaling but other interventions are equally imperative. Leading ecological economists have emphasised the importance of shortening the workweek for both ecological sustainability and human wellbeing (Dietz and O'Neill, 2013; Hickel, 2020). A shorter workweek translates into lowered extraction, as well as reduced production and lower energy consumption. Shortening the workweek also allows for work-sharing, redressing unemployment.

Working less supports human wellbeing by allowing people to switch from *doing* too much to *being* more spaciouly: devoting more time to non-consumptive (or less consumptive) activities like cultivating friendships, tending gardens, exercising, engaging in volunteer work and apprenticeships, and pursuing hobbies and spiritual interests. Such activities are less impactful on nature and enable human beings to explore the meaning of being alive. Cutting back the workweek will create a far less destructive economy, while fostering a civilisation that values self-realisation for all people.

Another indispensable component of downscaling is to end the production of luxury, throwaway and rapid-obsolescence products. For example, the fact that mining is still carried out for the mass production of jewellery is something that

should deeply dismay us. The fact that cars, cell phones, personal computers and so on are ceaselessly produced as 'new models' should repel us. Even as we eliminate superfluous commodities and make products more durable, we need to transition from an extraction economy to a recycling economy. And since we know that recycling consumes energy, we must simultaneously work toward conserving and sharing goods.

Economic activity related to the global military establishment must be greatly curtailed. The military industry devours inordinate amounts of energy and materials. It demands extravagant funding, which if redirected to social programmes and nature protection would advance human and planetary wellbeing (Klein, 2019). This unprecedented historical moment must also spur humanity to recognise the insanity of taking militarism for granted and the sanity of transitioning to a fully demilitarised global civilisation (Crist et al., 2024).

The debt-based global capitalist economy interconnecting billions of consumers (with more billions in the wings) is the most powerful accelerator of overshoot, lacking any built-in mechanism to break its destructive spiral. The financial system – so Byzantine in its workings that no one fully understands it – hinges on the mechanism of credit, debt and the device of the credit card to 'abolish poverty' and produce middle class populations indentured, through debt, to working for the system (Lazzarato, 2012). Financial capitalism produces a fake form of wealth with *real* purchasing power, bankrolling the expansion of the technosphere at all levels (from building highways to buying personal computers) at the expense of nature's integrity, at the cost of continuous waste streams and with the bill-due constantly pushed into the future. How to revamp the global capitalist financial system is admittedly difficult to imagine within the current economic status quo. However, this should not stop us from recognising that, as the main engine of economic growth augmented enormously by the growing global middle class, it is driving the desolation of Earth.

As a last point on shrinking economic activity, we must focus on the industrial food system, which is delivering lethal blows to biodiversity, contributing heftily to global heating and planet-wide pollution and undermining human health (Campbell et al., 2017; Crist, 2019; Benton et al., 2021). The most harmful component of the industrial food system is animal agriculture, which continues to spread in tandem with the

growing global middle class and the relentless pressures of animal-food industry interests. Beyond its high ecological costs and human disease consequences, industrial animal agriculture egregiously violates the basics of ethical treatment of animals. We offer a plea for an ambitious UN global initiative advocating mostly plant-based eating, which could help spur reduction of the global livestock population. This turn would free large swathes of land for ecological restoration and rewilding, deliver better health outcomes for people and reduce the violent exploitation of animals. We also need to rethink food consumption more broadly, substantially reducing processed and packaged foods and the trading of foods. From the shallow call 'to feed the world', we are invited to shift to a new sensibility of 'nourishing humanity': eating more locally, more plant-based and clean food produced with minimal industrial inputs (Benton et al., 2021; Crist et al., 2021).

Reduce and restrain the technosphere

Humanity must find a way to restrain the sprawl of industrial material culture, including infrastructures. Reducing the global population and economic activity will take us a long way in the direction of containing the technosphere and allowing expansive natural ecosystems and abundant wild plants and animals to revive (Crist et al., 2021). However, deliberately choosing to limit the reach of the technosphere, including human suburban and exurban settlements, aviation, roads, pipelines and other infrastructures, is a crucial aspect for moving toward an ecological civilisation (Laurance, 2018).

Conclusion

A commitment to downscaling the human factor on demographic, economic and technosphere fronts is imperative for transitioning to a simple, equitable and high-quality material and spiritual life for all humanity within an ecologically restored planet of biophysical abundance. Such a transition can be effected by means of honouring fundamental human rights, including the rights of children and future generations. A commitment to downscaling recognises the essential role of animals and ecologies for human physical, mental and spiritual wellness, as well as their inherent right to dignity and sufficient habitat and resources to thrive. Acknowledging that Earth is our *sacrosanct home* – not a stage for human development, resource or spaceship – lays the groundwork for promoting protected natural areas, ecological restoration, rewilding projects, agroecological farming, urban green spaces and strong legal frameworks to halt and reverse the

defaunation of land and seas. We appeal to the UN to enlarge our understanding of justice to include all lifeforms, wild and domestic, and the care of their habitats and homes (Kimmerer, 2013).

The dynamic stability and vitality of Earth's ecosystems and all its inhabitants demand a major reorientation of the human imagination to respond soberly to mounting social and ecological crises. We must face the truth by grounding ourselves in humility, relinquishing planetary domination, shrinking human presence and activities, and spurring into action to reinstate kin-centric relations with the planet and its entire community of life. To move beyond the failed approaches of our current politics requires us to abandon the incessant pursuit of growth, and to embrace a sense of our shared humanity embedded within the larger web of life. We urge the UN to help lead the way.

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