



Beyond the Big Four: The World's Other Pressing Problems

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This plan is an initial draft prepared with AI models. It is open for review by subject-matter experts and will be revised as they join the work and as world and national events change.

Introduction

War, hunger, poverty and climate change are rightly seen as the world's most pressing problems, but they are not the whole picture. They are vivid, measurable and widely agreed upon, and together they account for a vast share of human suffering. Yet a list built only on what is most visible risks missing problems of comparable scale that are quieter, slower or harder to see.

This essay makes the case for widening the lens. It uses three questions to judge importance: how many beings a problem affects and how badly (scale), how much attention it already receives (neglect), and whether effort can actually improve it (tractability). It also asks a fourth question that the traditional list tends to skip: whose suffering counts?

By those measures, several further issues deserve a place alongside the big four. Some cause death and misery on a similar scale. Some are the underlying conditions that allow war and poverty to persist. Some threaten outcomes so severe they could reshape the future. And one, the treatment of animals, challenges the assumption that only human suffering belongs on the list at all.

Global health: disease, pandemics and drug resistance

Infectious disease still kills on the scale of a major war every year, and the next pandemic could dwarf them all. Malaria, tuberculosis and HIV together kill well over a million people annually (approximate), mostly in low-income countries and disproportionately children. These deaths are largely preventable with tools that already exist: bed nets, vaccines, antiretroviral drugs and basic diagnostics. That makes global health one of the most tractable problems on any list.

COVID-19 showed a different kind of danger. A single novel pathogen killed millions, shut down economies, interrupted schooling for a generation and pushed tens of millions back

into extreme poverty. In other words, a health crisis can undo years of progress against hunger and poverty in months. Yet preparedness funding tends to spike after a crisis and fade as memory fades.

Antimicrobial resistance is the slow-moving version of the same threat. Overuse of antibiotics in medicine and agriculture is breeding bacteria that no drug can kill. Resistant infections are already linked to more than a million deaths a year (approximate), and projections suggest this could rise sharply by mid-century. If antibiotics stop working, routine surgery, childbirth and cancer treatment all become far more dangerous. Few people have heard of the problem, which is precisely why it deserves attention.

Air pollution, water and sanitation

The air people breathe and the water they drink kill more people than most wars. The World Health Organization attributes several million premature deaths a year to outdoor and household air pollution combined (approximate), from stroke, heart disease, lung cancer and respiratory infection. Much of the household toll comes from cooking over open fires with wood, dung or coal, a problem that falls hardest on women and small children.

Air pollution is often folded into “climate change,” but it deserves to stand on its own. Its harms are immediate and local rather than gradual and global. And its fixes, such as cleaner stoves, vehicle standards and cleaner power, deliver health benefits within years.

Water and sanitation tell a similar story. Roughly two billion people still lack safely managed drinking water, and even more lack safe sanitation (approximate). Contaminated water spreads diarrhoeal disease, which remains a leading killer of young children. The burden of fetching water, often hours a day, falls mainly on women and girls and keeps many out of school. Few investments return as much in health, education and economic output as a clean tap and a toilet.

Mental health

Mental illness is one of the largest sources of human suffering, and one of the least treated. Depression and anxiety disorders affect hundreds of millions of people and rank among the leading causes of disability worldwide. Suicide claims hundreds of thousands of lives each year, many of them young people.

The case for importance rests partly on scale and partly on neglect. In many low-income countries there is less than one psychiatrist per hundred thousand people, and mental health receives a tiny fraction of health budgets everywhere. Even in wealthy countries, waiting lists are long and stigma keeps many from seeking help.

Mental health also connects to every other problem on the list. War leaves populations traumatised for generations. Poverty and insecurity drive stress and despair, and mental illness in turn makes it harder to work, learn and escape poverty. Evidence suggests that fairly simple interventions, including talk therapy delivered by trained lay workers, can be effective and cheap. That combination of vast need and proven, affordable tools is exactly what makes a problem pressing.

Catastrophic risks: nuclear weapons and emerging technology

Some problems matter not because of the harm they cause today, but because of the harm they could cause in a single bad day. Nuclear weapons are the clearest case. Around twelve thousand warheads still exist (approximate). A large exchange would kill hundreds of millions directly, and studies of “nuclear winter” suggest the smoke could cut global food production for years, threatening famine far beyond the warring countries. Nuclear risk overlaps with war, but it is different in kind: it is the one form of conflict that could end modern civilisation.

Emerging technologies raise related concerns. Advances in biotechnology make it steadily easier to engineer dangerous pathogens, whether by accident or by intent. Artificial intelligence is advancing quickly and raises questions ranging from the everyday (misinformation, job disruption, surveillance) to the severe (loss of human control over powerful systems, or dangerous concentrations of power). Experts disagree widely on how large and how near the risks are.

The argument for prioritising such risks is that their consequences would be enormous and possibly irreversible. Even a small probability of catastrophe matters when the stakes include billions of lives and the entire future. The counter-argument is that speculative risks can distract from certain suffering happening now. A sensible position probably takes both seriously, since the funding devoted to catastrophic risk is small relative to its potential scale.

Institutions: trust, democracy and inequality

Weak institutions may be less a problem in their own right than the soil in which war, hunger and poverty grow. The economist Amartya Sen famously observed that functioning democracies with a free press rarely suffer famines, because governments that must answer to voters cannot easily ignore mass starvation. Corruption diverts aid and public money. The absence of the rule of law discourages investment and entrenches poverty. Conflicts often begin where institutions have already failed.

In many countries today, the institutions that let societies solve problems together are under strain. Trust in governments, media and science has fallen. Misinformation spreads quickly, and political polarisation makes compromise harder. Independent monitors have recorded years of democratic backsliding across many regions. None of this kills directly, but it weakens the capacity to respond to pandemics, climate change or economic crises.

Inequality is more contested. Some argue that extreme gaps in wealth and opportunity fuel resentment, capture political systems and waste human talent. Others argue that what matters most is raising absolute living standards, and that inequality is secondary if the poorest are becoming better off. Either way, the distribution of power and resources shapes who suffers when things go wrong, which is why it belongs in the conversation.

Displacement, education and the rights of women and girls

At the end of 2025, 117.8 million people were forcibly displaced from their homes, about one in every 70 people on Earth ([UNHCR](#)). That total fell for the first time in a decade, driven by record returns, but new wars in 2026 have already displaced millions more ([Al Jazeera](#)). Displacement sits where war, climate and poverty meet. Refugees often spend years or decades in camps, and children make up close to 40% of them ([UNHCR](#)).

Education is one of the strongest multipliers of progress. Each additional year of schooling raises lifetime earnings, and educated populations tend to be healthier and more resilient. Yet hundreds of millions of children are out of school or in school without learning basic literacy and numeracy.

The position of women and girls ties these threads together. Educating girls is linked to later marriage, fewer and healthier children, lower child mortality and higher household income. Where women can own property, earn income and participate in public life, families and economies are stronger. Where they cannot, half of a society's potential is lost. In several countries, women's rights have recently gone backwards, which is a reminder that progress is not guaranteed.

Animal welfare and the science of animal consciousness

If animals can suffer, then the way humans treat them may be the largest source of suffering on the planet. That conditional has become much harder to dismiss. Over the past fifteen years, research on animal minds has moved the scientific question from “do animals feel anything?” to “which animals feel what, and how much?”

What the science now says

In 2012, a group of prominent neuroscientists signed the Cambridge Declaration on Consciousness. It stated that humans are not unique in possessing the brain structures

that generate consciousness, and that mammals, birds and octopuses have them too.

In 2024, the New York Declaration on Animal Consciousness went further. Signed by hundreds of scientists and philosophers, it held that there is strong scientific support for conscious experience in mammals and birds. It also held that there is at least a realistic possibility of consciousness in all vertebrates, including fish, reptiles and amphibians, and in many invertebrates, including octopuses, crabs, lobsters and insects. Its key ethical claim was simple: where there is a realistic possibility of sentience, it is irresponsible to ignore it.

The evidence behind these statements comes from many directions:

- **Pain and trade-offs.** Fish, crabs and other animals do not just reflexively flinch. They will pay a cost to avoid painful stimuli, tend wounds, and seek out painkillers when injured. These are signs of felt experience rather than mere reflex.
- **Emotion.** Rats, pigs and dogs show states that function like fear, anxiety, pleasure and even optimism or pessimism, and these respond to the same drugs that alter human mood.
- **Cognition.** Crows make and use tools and plan ahead. Great apes, dolphins, elephants and some birds pass tests of self-recognition. Pigs solve problems at a level often compared to young children.
- **Play and curiosity.** Bumblebees have been observed rolling small balls with no reward other than, apparently, the activity itself.

In 2025, researchers Kristin Andrews, Jonathan Birch and Jeff Sebo set out a “marker method” in the journal *Science* for assessing consciousness systematically ([Science](#)). The approach looks for specific markers of particular dimensions of experience, such as pain, in a given species ([NYU](#)). The authors argue that animal welfare policies would likely need to expand as a result.

How similar to us?

The claim that animal consciousness is “not dissimilar” to human consciousness is partly right and needs care. The capacities most relevant to ethics, feeling pain, fear, distress and pleasure, appear to be widely shared. They rest on brain systems that evolved long before humans and are conserved across mammals and birds. A pig in pain is, as far as science can tell, feeling something much like what a human in pain feels.

Other capacities differ more. Language, abstract reasoning, long-range planning and reflection on one’s own life seem richer in humans, and the inner lives of fish or insects may be very different from ours. Scientists also still lack a settled theory of consciousness. Some researchers warn that overstating the evidence could slow the development of better tests ([The Transmitter](#)). A recent paper also found that people tend to under-

attribute experience to animals despite converging behavioral and neural evidence (Frontiers in Psychology).

The important point is that moral consideration does not depend on an animal being cognitively like us. As the philosopher Jeremy Bentham put it in 1789: “The question is not, Can they reason? nor, Can they talk? but, Can they suffer?” The science increasingly answers that question with yes, for a very large number of species.

The scale of the problem

The numbers are staggering. Humans slaughter more than 80 billion land animals for food each year, and an estimated one to several trillion fish are caught or farmed (approximate). Most farmed land animals worldwide live in industrial systems. There, hens may spend their lives in cages too small to spread their wings, pigs are kept in crates where they cannot turn around, and broiler chickens are bred to grow so fast that many struggle to walk. Fish are commonly killed by suffocation or live chilling, often without any stunning.

Millions of animals are also used in research each year, and insect farming for feed is expanding rapidly, potentially involving trillions more animals whose capacity for suffering is uncertain. If even a fraction of these animals experience suffering comparable to our own, the total is larger than any human problem on this list.

The moral and ethical consequences

Several consequences follow if the science is taken seriously.

1. **Suffering matters wherever it occurs.** If a being can suffer, most ethical traditions agree that its suffering counts for something. The philosopher Peter Singer argued that giving it no weight simply because the being is not human is “speciesism,” a prejudice comparable to discrimination by race or sex. Even those who reject that comparison usually accept that causing unnecessary suffering is wrong.
2. **“Unnecessary” is doing a lot of work.** Most people already agree that cruelty to animals is wrong. The harder question is whether practices that cause vast suffering for cheaper food or convenience count as necessary. For many people in wealthy countries, alternatives are available, which strengthens the case that much of this suffering is avoidable.
3. **Uncertainty calls for precaution, not dismissal.** Where it is unclear whether fish, crabs or insects can suffer, a precautionary approach says we should take reasonable steps to avoid harm rather than wait for proof. The UK took this route in 2022, recognising octopuses, crabs and lobsters as sentient in law after a scientific review led by Jonathan Birch.

4. **Practical changes follow.** These include cage-free and crate-free housing, humane stunning at slaughter including for fish, slower-growing chicken breeds, and reduced and refined use of animals in research. They also include investment in plant-based and cultivated alternatives, and careful regulation before insect farming scales further.
5. **The question widens further.** The same reasoning raises hard questions about the suffering of wild animals, and about how to judge consciousness in systems unlike us, including future AI systems.

The other side of the argument

There are serious counter-arguments, and a fair account should include them. Some philosophers hold that full moral status depends on rationality, moral agency or the ability to enter reciprocal relationships, which animals lack. On this view, animals deserve protection from cruelty but not equal consideration. Many religious and cultural traditions affirm a special place for humans while still calling for kindness to animals.

There are practical concerns too. Livestock supports the livelihoods of hundreds of millions of people, including many of the world's poorest. Animal-source foods are an important source of nutrition where diets are limited. Animal research has underpinned many medical advances. And many people believe human needs should come first while humans still suffer from war, hunger and poverty.

These objections suggest that how much weight animal suffering deserves remains genuinely contested. But they rarely justify ignoring it entirely. And because animal welfare receives only a tiny fraction of charitable and government attention relative to its scale, it scores highly on neglect by almost any measure.

Conclusion

The world's most pressing problems form a web, not a list. Air pollution and disease kill on the scale of war. Weak institutions and eroding trust let famine and conflict take hold. Mental illness, displacement and denied education trap people in poverty. Nuclear weapons and emerging technologies carry risks severe enough to threaten everything else. And the evidence on animal consciousness suggests that the circle of beings whose suffering counts is far wider than the traditional list assumes.

How these issues are ranked depends on values that reasonable people weigh differently. Does suffering now outweigh risks later? Do future generations count equally? How much does the suffering of a pig, a fish or a bee matter compared to a person's? There is no single right answer. But there is a strong case that each issue in this essay deserves a place in the conversation alongside war, hunger, poverty and climate change. Many of them are also more neglected, and more tractable, than their scale would suggest.

Figures marked “approximate” are from general knowledge and should be checked against current sources before being quoted.

Sources

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