222 scientists say cascading crises are the biggest threat to the well-being of future generations

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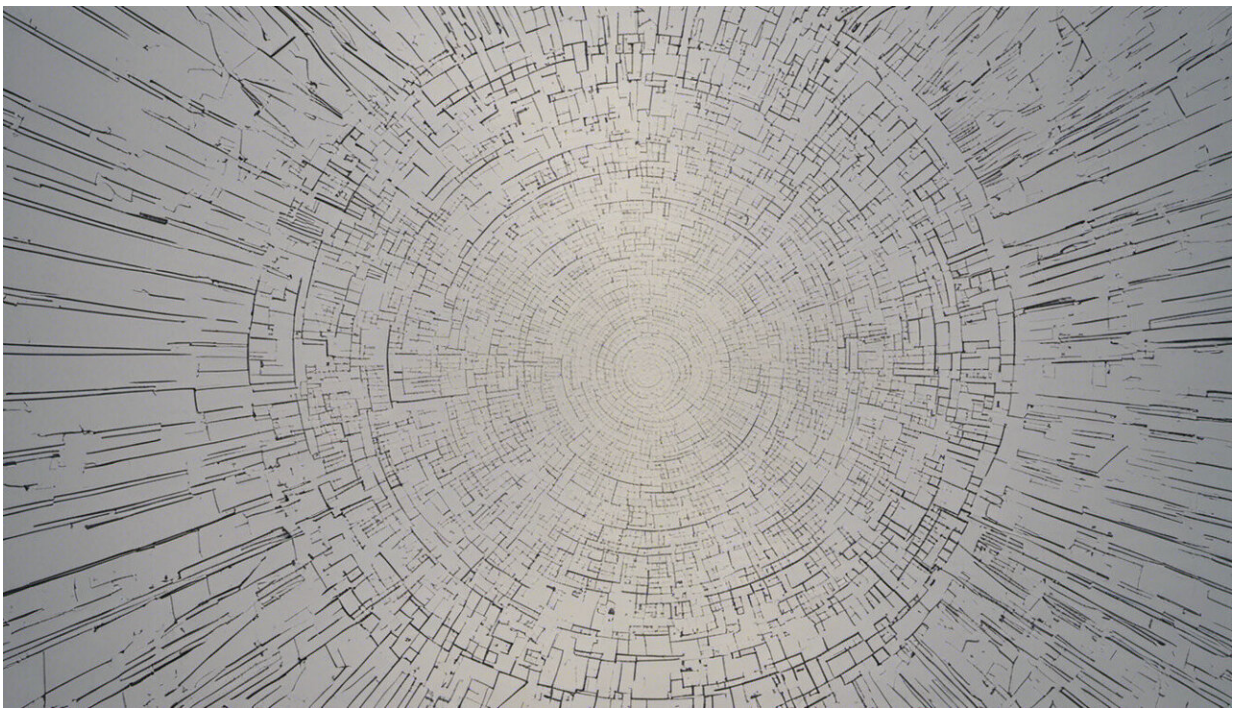

Credit: AI-generated image (disclaimer)

The bushfires raging across Australia this summer have sharpened the focus on how climate change affects human health. This season bushfires have already claimed more than 30 human lives, and many people have grappled with smoke inhalation and mental health concerns.

The changing nature of bushfires around the world is one of the tragic consequences of climate change highlighted in "Our Future on Earth, 2020"—a report published on Friday by Future Earth, an international sustainability research network.

The report includes a survey of 222 leading scientists from 52 countries who identified five global risks: failure of climate change mitigation and adaptation; extreme weather events; major biodiversity loss and ecosystem collapse; food crises; and water crises.

They identified these risks as the most severe in terms of impact on planetary health—the health of human civilisation and the state of the natural systems on which it depends.

Notably, the scientists underlined the threat that the interplay and feedback loops between these risks pose. In other words, each of these global risks worsens one another in ways that may cascade to create a worldwide systemic crisis.

For instance, it's not just bushfires—it's the combination of bushfires with drought, biodiversity loss, floods and ecosystem degradation.

We should not be thinking about them in isolation as politicians sometimes seem to do, for instance by proposing to respond to bushfires by simply removing vegetation.

Ultimately, the report leads us to wonder: will humans continue to thrive on Earth? The answer depends on whether we can act together, with urgency, to reduce our footprint.

Hopefully, some good can come from this summer's devastating bushfires. They might just help us wake up to the urgent need for climate action. The health and well-being of future generations depends

on it.

The report isn't all doom and gloom

Beyond these global risks, the report covers topics including food, oceans, politics, media and forced migration. The report doesn't simply describe problems, it highlights where progress is being made, such as with technology.

Much existing technology is being used to promote consumption in the pursuit of economic growth, rather than to safeguard ecosystems or to promote just and fair societies. But the report also highlights how the digital sector has immense potential for reducing emissions and empowering people to monitor and protect ecosystems.

This can include, for instance, using digital technologies to improve energy efficiency and reduce emissions in buildings, transport and industry. And new imaging technologies are providing satellite data to monitor forests in real time, and track deforestation and illegal forest activity.

But the "great acceleration" of economic growth during the second half of the 20th century has put enormous pressure on earth systems. Rapid expansion of broadscale agriculture and extensive mining in some regions has led to deforestation, biodiversity loss and land degradation.

Now, there is an opportunity to reverse this trend by harnessing investments and financial instruments for sustainable development, including green bonds, sustainability-linked loans and more.

Credit: AI-generated image (disclaimer)

Connecting crises through the lens of health

One way we can connect the five global risks, tackling them in a holistic way, is to think about human health. Specifically, human health offers a useful perspective on sustainable development for policy-makers for three reasons.

First, it makes clear the need for action is urgent because extreme weather events—amplified in frequency, intensity and duration by climate change—are already affecting health.

This is not a future issue, we're already seeing health impacts in Australia. Smoke from the fires has exposed about half of Australia's total human population to hazardous levels of air pollution for weeks.

And mental health experts are concerned about rising levels of anxiety about bushfires.

Health also makes the need for action more personal. There are compelling human stories about the loss of lives and livelihoods from environmental change for engaging policy makers. This isn't an abstract environmental issue: it's affecting real people in our local communities.

But it's not all bad: there are health benefits from transitions to sustainable development. For instance, we're able to, by 2030, reduce the 7 million annual deaths from air pollution by two-thirds.

Using this health lens can illuminate potential win-win-wins from sustainable development policy, and can help policy makers grapple with the enormity of the crises the world faces.

Health in all nations

Dr. Gro Brundtland, who chaired the World Commission on Environment and Development in 1987, contributed to Our Future on Earth.

She notes that a key message from the 1987 report remains relevant, explaining: "Our most urgent task today is to persuade nations of the need to return to multilateralism."

In other words, the future health of Australian people depends on people from other nations. Dr. Brundtland is reminding us of the interdependence of all people on Earth.

For Australia, this means we should be actively supporting the Paris Agreement on climate change. We also must carefully reflect on the health impacts in other countries from our thermal coal exports, as more

than 440,000 premature deaths each year are associated with air pollution from coal burning.

Beyond humans, Dr. Brundtland's call for multilateralism is a broader reminder of the interdependence of all species—all animals, plants and microorganisms.

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