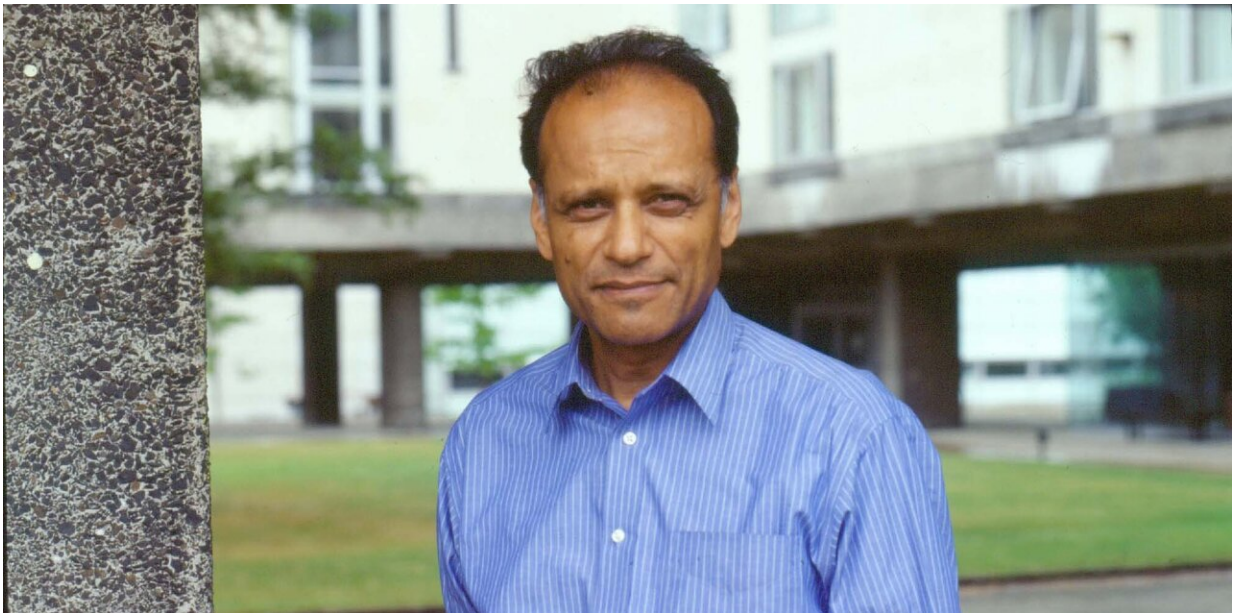


Nature's value must be included in economics to preserve biodiversity

February 2 2021



Prof Sir Partha Dasgupta outside the Faculty of Economics at the University of Cambridge, where he has worked for over 30 years. Credit: University of Cambridge

Nature is a 'blind spot' in economics that can no longer be ignored by the accounting systems that dictate national finances and the decision-makers behind them.

This is according to a major global review released today on the

economics of biodiversity, produced by Professor Sir Partha Dasgupta from the University of Cambridge.

Commissioned by the UK Treasury in 2019, and published ahead of this year's Convention on Biological Diversity in China, the review is expected to help set the agenda for the UK Government's 25-year environment plan.

The long-awaited Dasgupta Review finds that humanity has collectively mis-managed its "global portfolio of assets"—meaning the demands on nature far exceed its capacity to supply the "goods and services" we all rely on.

The Review also contends that Gross Domestic Product is no longer fit for purpose when it comes to judging the economic health of nations. Dasgupta argues that GDP is "based on a faulty application of economics" that does not include "depreciation of assets" such as the degradation of the biosphere.

"My overarching aim is the reconstruction of economics to include nature as an ingredient," said Dasgupta, who is the Frank Ramsey Emeritus Professor of Economics at Cambridge and a Fellow of St. John's College.

"Truly [sustainable economic growth](#) and development means recognizing that our long-term prosperity relies on rebalancing our demand of nature's goods and services with its capacity to supply them."

Dasgupta says that sustainable economics means using a different measure to GDP. "It also means accounting fully for the impact of our interactions with Nature across all levels of society. COVID-19 has shown us what can happen when we don't do this."

Prime Minister Boris Johnson welcomed the Review, which he says makes clear that "protecting and enhancing nature needs more than good intentions—it requires concerted, coordinated action."

"This year is critical in determining whether we can stop and reverse the concerning trend of fast-declining biodiversity," Johnson said.

Biodiversity is declining faster than at any time in human history. Since 1970, there has been on average almost a 70% decline in the populations of mammals, birds, fish, reptiles, and amphibians. It is thought that one million animal and plant species—almost a quarter of the global total—are threatened with extinction.

Beyond its [intrinsic value](#), biodiversity provides us with fundamental natural "dividends" that nurture and nourish us: from basic sustenance through fish stocks or insects that pollinate crops, to soil regeneration, and water and flooding regulation. Not to mention the cultural and spiritual values that enrich our lives.

The complete absence of these vital "ecosystem services" in national balance sheets has intensified the destruction of the natural world. The Review argues that the current species extinction crisis we face—of our own making—is undermining the "productivity, resilience and adaptability" of nature. This in turn has put our economies, livelihoods and well-being at serious risk.

A very basic example of the gaping holes in our accounting might see woodland destroyed to build a shopping center. GDP records increase in produced capital, but no depreciation of the "natural capital" that absorbs carbon, acts as a habitat for pollinators, and provides direct benefits to us—from recreation to purified air—that reduce burdens on health services.

Nations are judged to have thriving economies at the same times as their biological assets are decimated. "Nature is our home," said Dasgupta. "Good economics demands we manage it better."

His 600-page Review makes clear that urgent and transformative action taken now would be significantly less costly than delay, and will require change on three broad fronts:

Firstly, humanity must ensure its demands on nature do not exceed its sustainable supply. We must urgently increase the global supply of "natural assets". Recommendations include the expansion and improved management of Protected Areas, and enacting policies that "discourage" damaging forms of consumption—meat-heavy diets, for example.

Secondly, we must adopt different metrics for economic success. This requires moving towards an "inclusive" measure of wealth, one that injects natural capital into national accounting systems as a critical first step. Dasgupta was among the Cambridge academics that helped the United Nations launch their updated 'Ecosystems Accounting' framework at the end of last year.

However, this "inclusive wealth" should ultimately go further, so that national economics can account for everything from human health and skills to the value of communities—all essential to what we think of as "productivity".

Leading academics including Professor Diane Coyle are already building on Dasgupta's work to define new ways of measuring [economic](#) success—physical, financial, human, natural and social capital—at the University's Bennett Institute for Public Policy.

Thirdly, we must transform our institutions and systems—particularly finance and education—to enable these changes and sustain them for

future generations. This includes increasing public and private "financial flows" that enhance natural assets, and decreasing those that degrade nature.

Crucially, it also means empowering citizens to make informed choices and to demand change—not least by firmly establishing the natural world in education policy. "Education systems should introduce Nature studies from the earliest stages of our lives, and revisit them in the years we spend in secondary and tertiary education," writes Dasgupta.

The Review points to three properties that mean natural processes—and accounting for them in economics—differ from produced capital goods: mobility, silence, and invisibility. These features also make it impossible to trace many of the harms inflicted on the natural world back to those responsible.

"Ultimately, we each have to serve as judge and jury for our own actions. And that cannot happen unless we develop an affection from Nature and its processes," Dasgupta writes. "If we care about our common future and the common future of our descendants, we should all in part be naturalists."

Sir David Attenborough, famed Cambridge alumnus and figurehead of the conservation movement, also welcomed today's publication, describing it in the Review's foreword as "the compass that we urgently need".

"Economics is a discipline that shapes decisions of the utmost consequence, and so matters to us all. The Dasgupta Review at last puts biodiversity at its core."

"This comprehensive and immensely important report shows us how by

bringing economics and ecology face to face, we can help to save the [natural](#) world and in doing so save ourselves," said Attenborough.

More information: Final Report - The Economics of Biodiversity: The Dasgupta Review. [www.gov.uk/government/publicat ... -the-dasgupta-review](http://www.gov.uk/government/publications/the-dasgupta-review)

Provided by University of Cambridge

Citation: Nature's value must be included in economics to preserve biodiversity (2021, February 2) retrieved 4 July 2024 from <https://phys.org/news/2021-02-nature-economics-biodiversity.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.