In 2019, HM Treasury commissioned an independent, global review on the economics of biodiversity, led by Professor Sir Partha Dasgupta.

The Review presents the first comprehensive economic framework of its kind for biodiversity, and calls for urgent and transformative change.

Grounded in a deep understanding of ecosystem processes and how they are affected by economic activity, this new framework sets out the ways in which we should account for Nature in economics and decision-making.
Our economies, livelihoods and well-being all depend on our most precious asset: Nature

Nature = asset

Biodiversity = portfolio diversification

Everyone = asset managers
However, we have failed to manage our global portfolio of assets.
Our demands far exceed Nature’s capacity to supply us with the goods and services we rely on.

Nature’s Supply
- $G$: Rate at which the biosphere regenerates
- $S$: Stock of the biosphere

(Biosphere regeneration)

Humanity’s Demand
- $N$: Human population
- $y$: Human economic activity per capita
- $\alpha$: Efficiency with which the biosphere’s goods and services are converted into GDP and the extent to which the biosphere is transformed by our waste products

(Ecological Footprint)

The Impact Inequality

$$\frac{N}{\alpha} > G(S)$$

Ecological footprint $\frac{N}{\alpha}$
Our unsustainable engagement with Nature is endangering the prosperity of current and future generations.

Risk and uncertainty = act now not later

Conservation > Restoration

Less costly to act now rather than later

The Option Value of Nature
Unsustainable engagement with Nature reflects institutional failure not only market failure.

Institutions are the rules and arrangements that govern collective undertakings – ranging from households to states.

Three key pervasive features of Nature – its **mobility, silence, and invisibility** – make it difficult to comprehensively record our use and impacts associated with Nature.
A simple truth: our economies are embedded within Nature, not external to it

Standard models of economic development view humanity as *external* to Nature.

Models that recognise Nature’s finitude still assume that technological advances will allow us to break free from Nature.

Accepting that our economy is embedded within the biosphere forces us to recognise the limits Nature places on the economy.
To engage sustainably with Nature, we need to change how we think, act and measure success.

Three broad and interconnected transitions:

1. **Balance the Impact Equation and increase Nature’s supply**
2. **Change our measures of economic success**
3. **Transform our institutions and systems**
INDEPENDENT REVIEW – NOT GOVERNMENT POLICY

- Adopt Inclusive Wealth as our measure of success
- Conserve and restore natural assets
- Empower citizens to make informed choices and implement change
- Improve access to community-based family planning and reproductive health
- Improve decision-making through natural capital accounting
- Improve efficiency of extraction from Nature and produce less waste
- Improve our productivity measures by ensuring they account for Nature
- Balance the impact equation and increase Nature’s supply
- Change our measures of economic success
- Transform our institutions and systems
- Effective institutions involving all levels of society – from local to global
- Better management of land and sea to benefit both Nature and people
- A global financial system that supports Nature
- Reform education and economics to reflect the role of Nature
Adopt Inclusive Wealth as our measure of success

Conserve and restore natural assets

Empower citizens to make informed choices and implement change

Improve access to community-based family planning and reproductive health

Improve efficiency of extraction from Nature and produce less waste

Improve our productivity measures by ensuring they account for Nature

Fair and sustainable consumption, production and supply chains

Improve decision-making through natural capital accounting

Effective institutions involving all levels of society – from local to global

Better management of land and sea to benefit both Nature and people

A global financial system that supports Nature

Reform education and economics to reflect the role of Nature

Balance the impact equation and increase Nature’s supply

Change our measures of economic success

Transform our institutions and systems
Summary

We are seriously mismanaging our most precious asset: Nature, and our demands are far exceeding its capacity to supply.

Economic and finance decision-making needs to reflect that humanity and the global economy are embedded within Nature.

Humanity needs to reduce its demands on Nature and increase Nature’s supply.

Economic measures of success need to be improved; Inclusive Wealth is the appropriate main measure of sustainable economic prosperity.

Effective institutions and systems are required to enable sustainable engagement with Nature, to help fix the problems of widespread institutional failure and pervasive externalities.