



THE DASGUPTA REVIEW

THE ECONOMICS OF BIODIVERSITY
THE FINNISH INNOVATION FUND SITRA WEBINAR
12 FEBRUARY 2021

Background of the Dasgupta Review

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

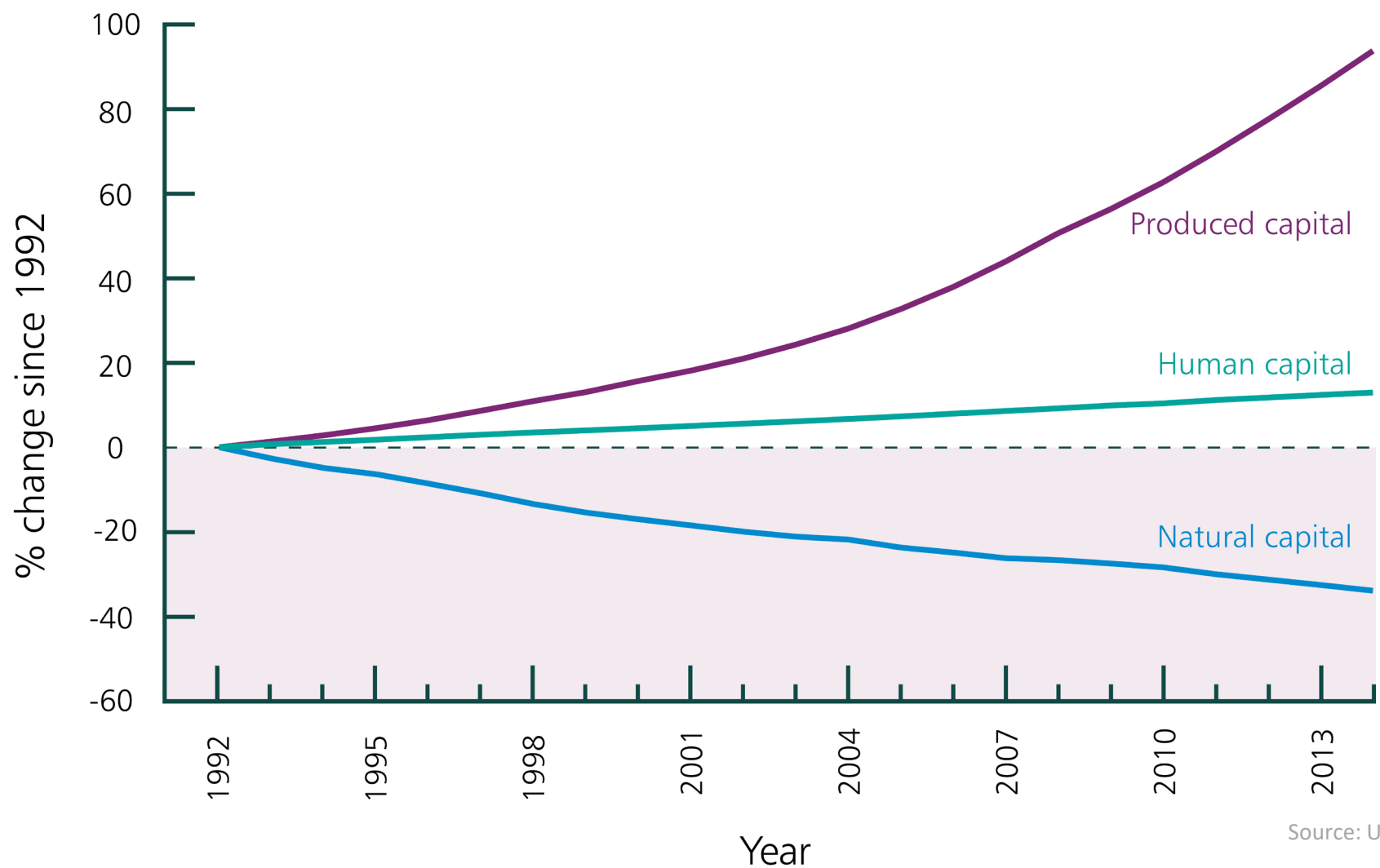


Biodiversity = portfolio
diversification



Everyone = asset
managers

However, we have failed to manage our global portfolio of assets

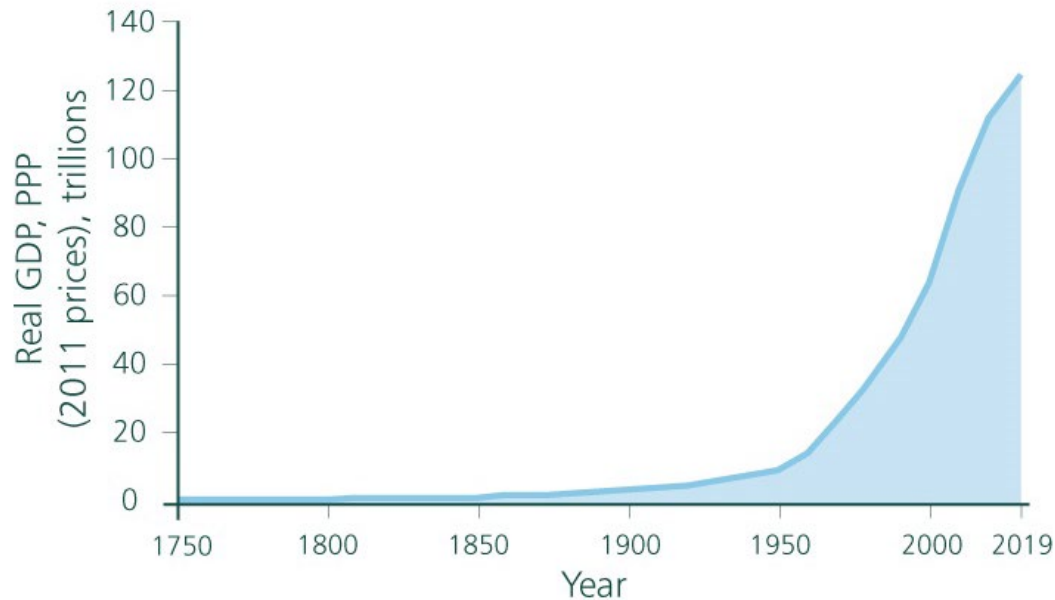


Source: UN Inclusive Wealth Report 2018

Humanity has achieved prosperity in a way that has come at Nature's expense

The best of times...

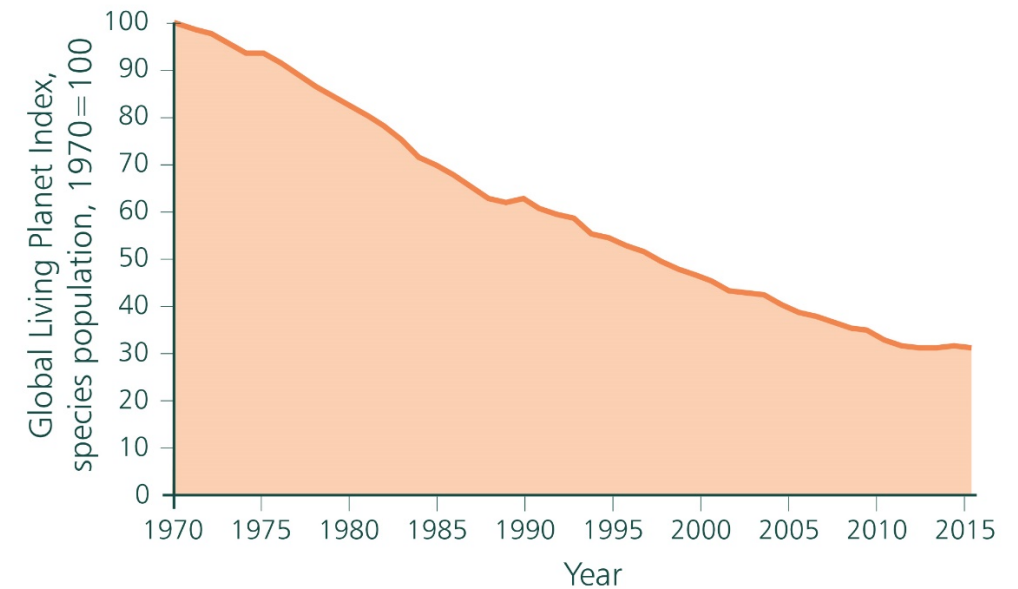
- Average income ↑
- Likelihood of being in absolute poverty ↓
- Life expectancy ↑
- Mortality rate ↓



Source: Our World in Data (2020), Maddison (2018)

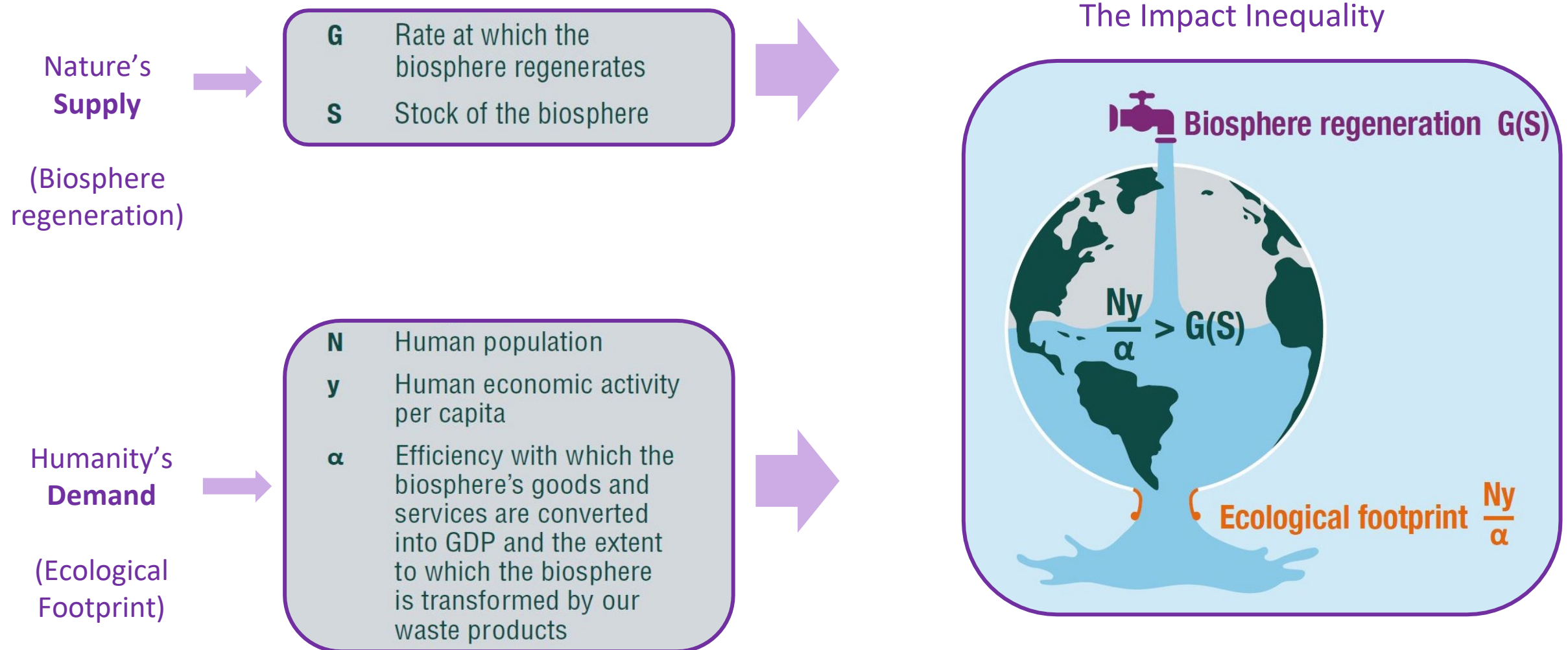
...the worst of times

- Species extinction rates ↑
- Availability of ecosystem services ↓
- Global temperature ↑
- Breaching of planetary boundaries ↑



Source: WWF Living Planet Index (2020)

Our demands far exceed Nature's capacity to supply us with the goods and services we rely on



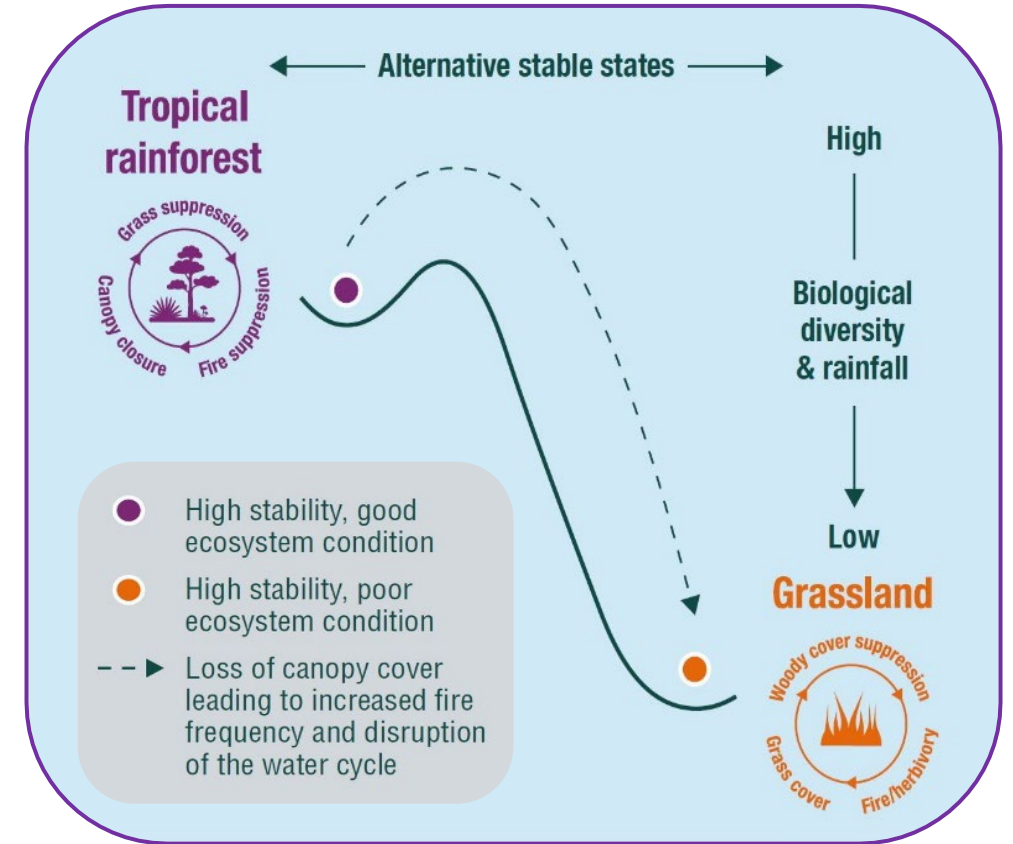
Tipping Points and Regime Shifts

Degradation of Nature can lead to tipping points.

Ecosystems shift from a biodiverse stable state to a poorer stable state.

It is difficult, if not impossible to return to the former state – ‘points of no return’.

Regime shifts can have far reaching consequences for our well-being.

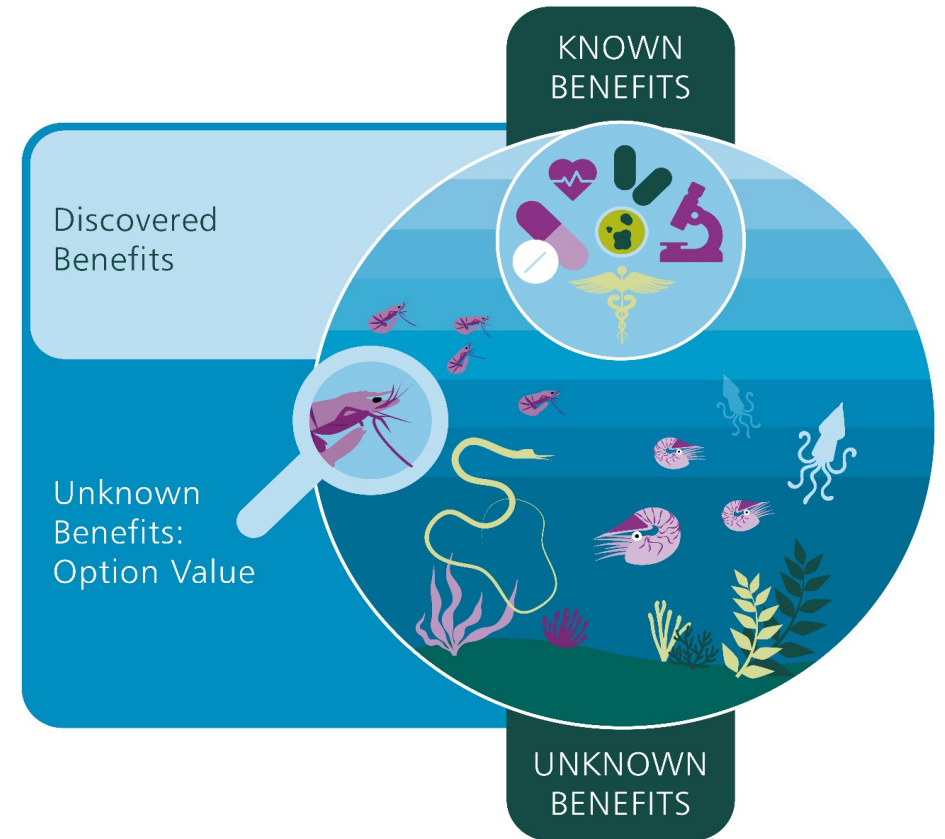


The Option Value of Nature

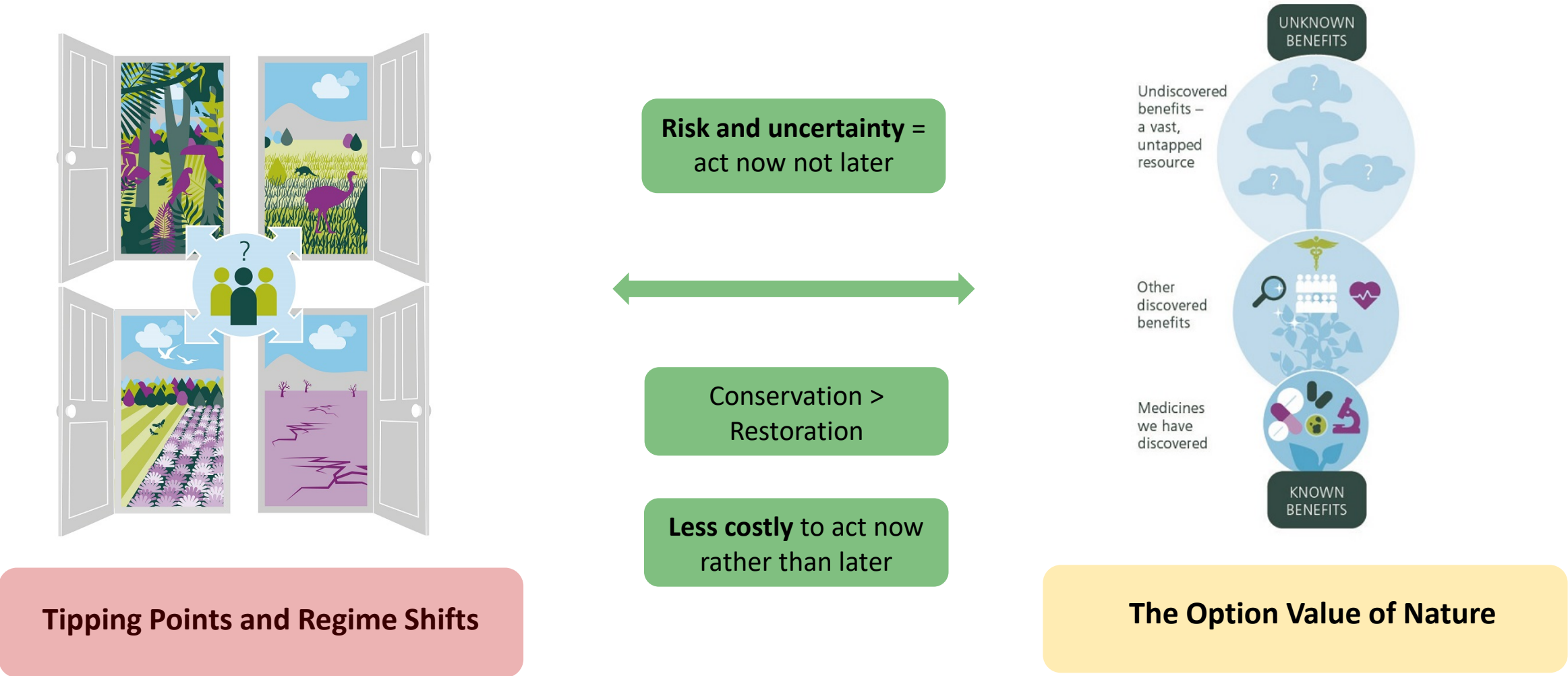
Many species (both known and undiscovered) may hold solutions to both current and future challenges.

Extinction is irreversible, and so the loss of a species means losing all its potential benefits.

Put simply, conservation is preferable over restoration as it allows us to keep 'our options open'.



Our unsustainable engagement with Nature is endangering the prosperity of current and future generations



At the heart of the problem lies deep-rooted, widespread institutional failure

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.

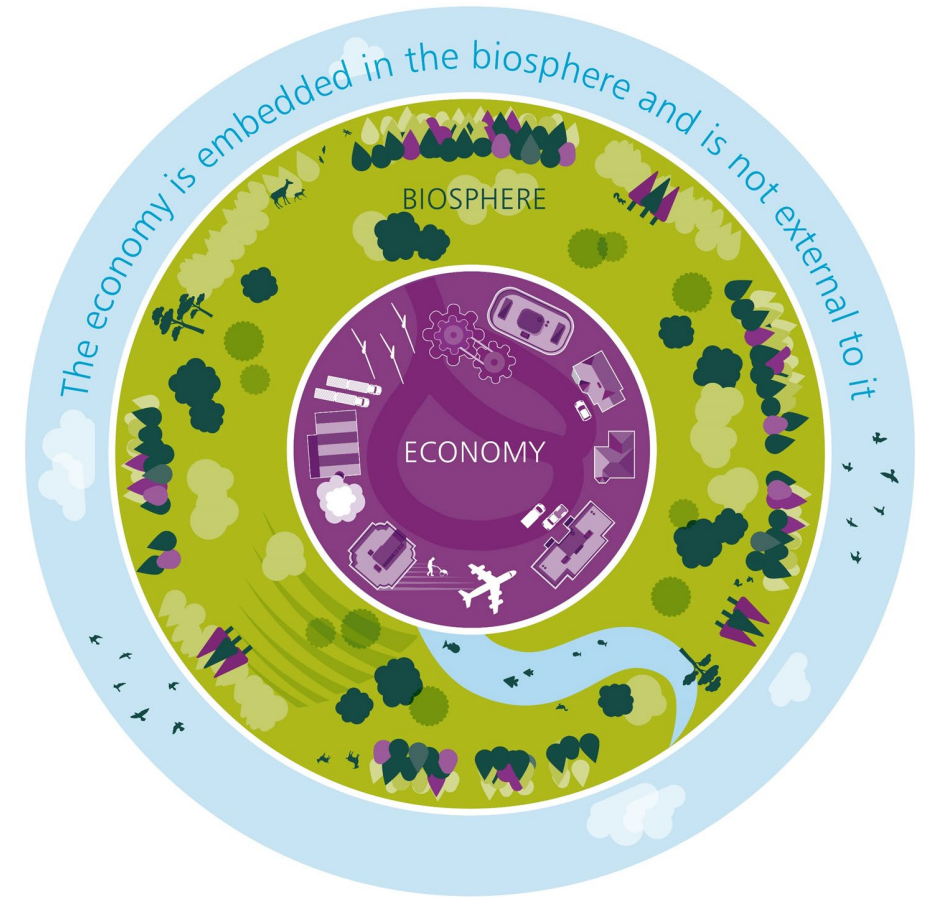


A simple truth: our economies are embedded within Nature, not external to it

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

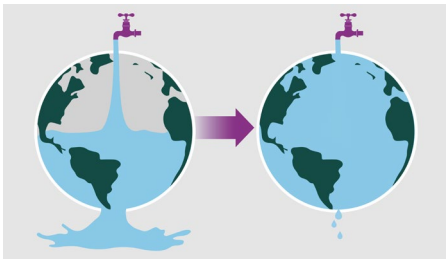
Models that recognise Nature's finitude still assume that technological advances will allow us to break free from Nature.

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

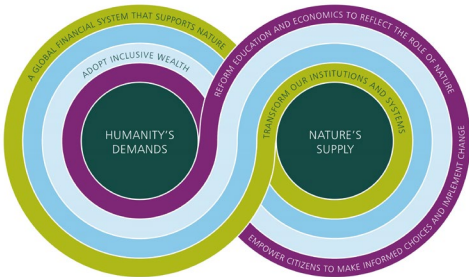
Balance the Impact Equation and increase Nature's supply



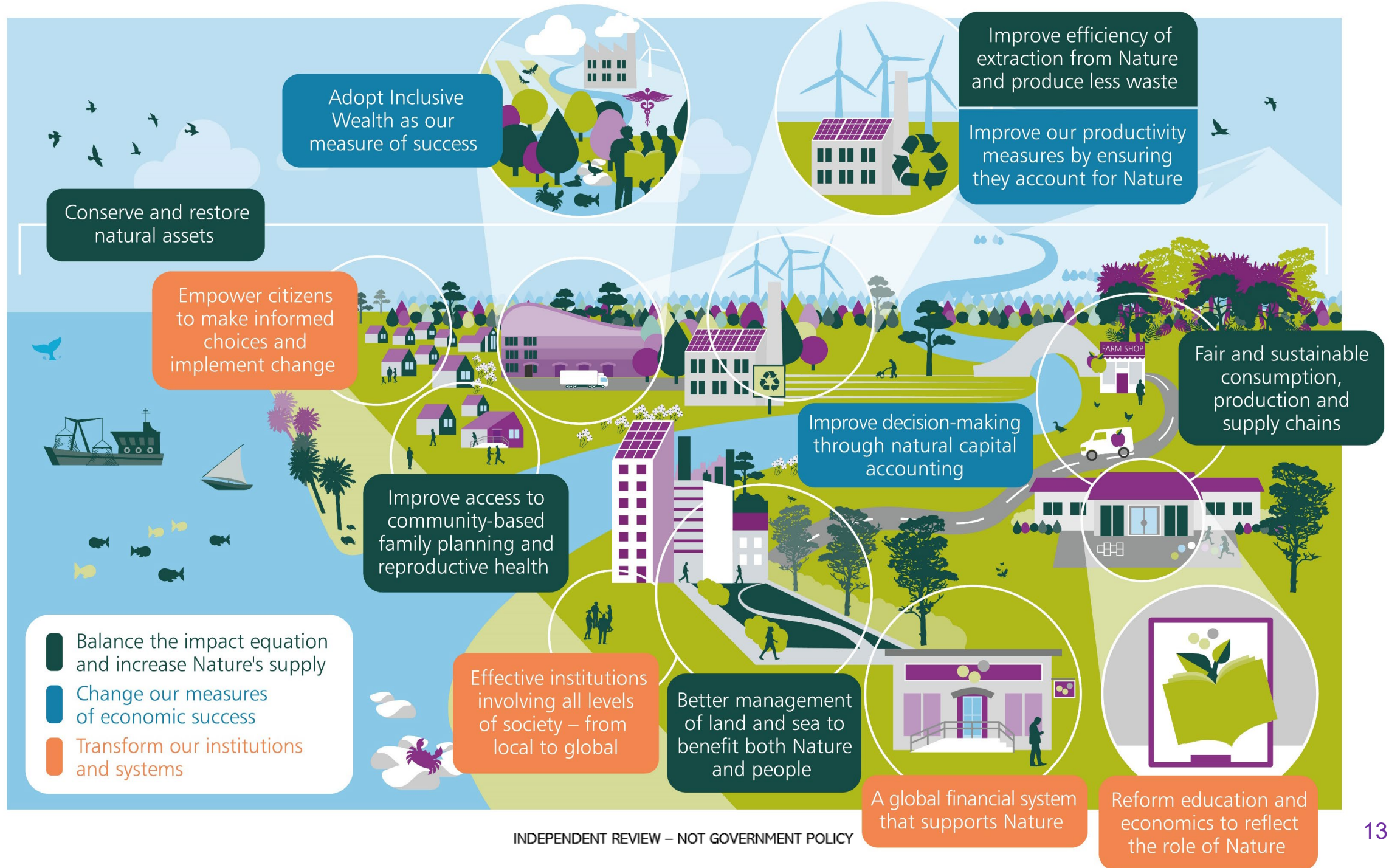
Change our measures of economic success

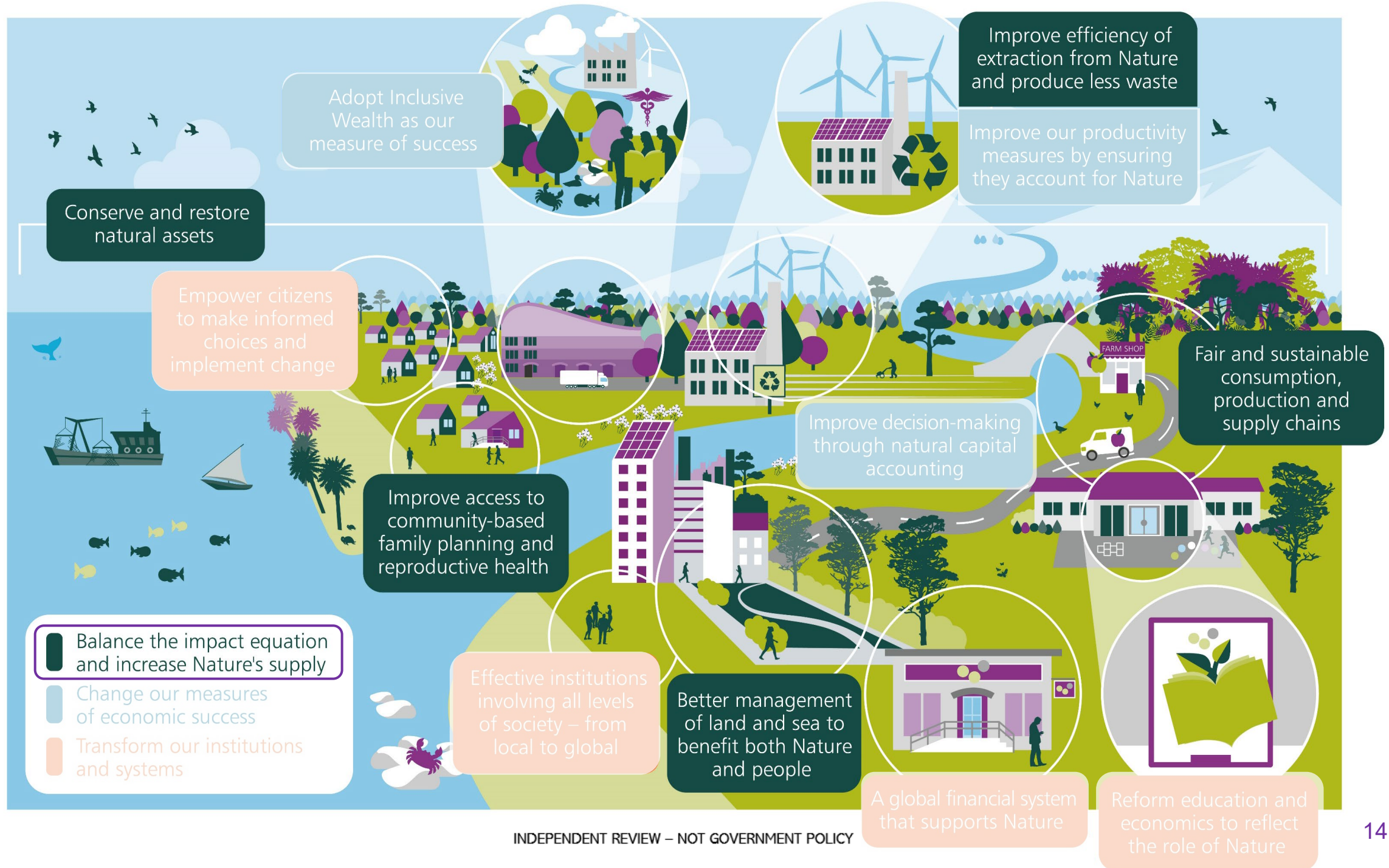


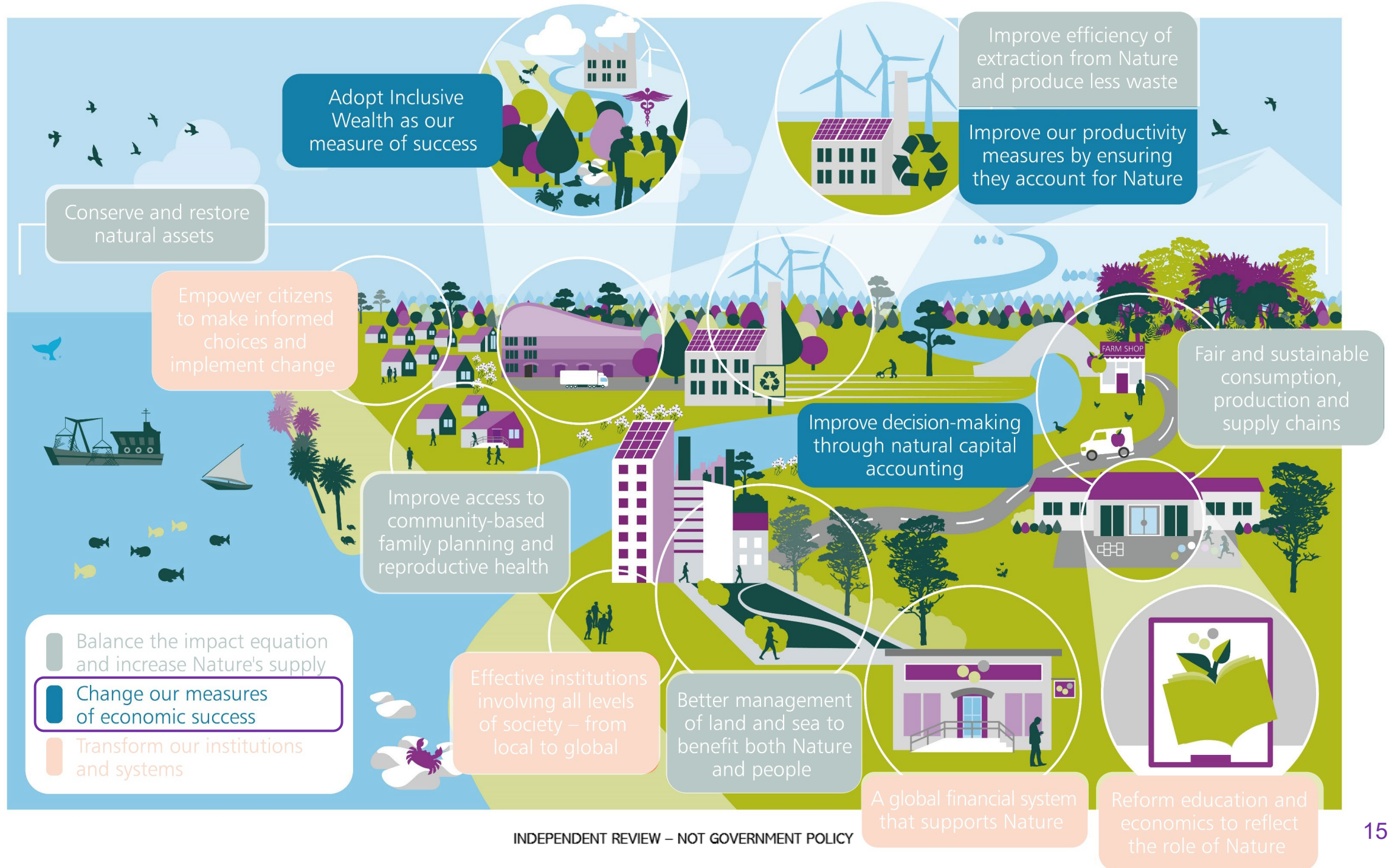
Transform our institutions and systems

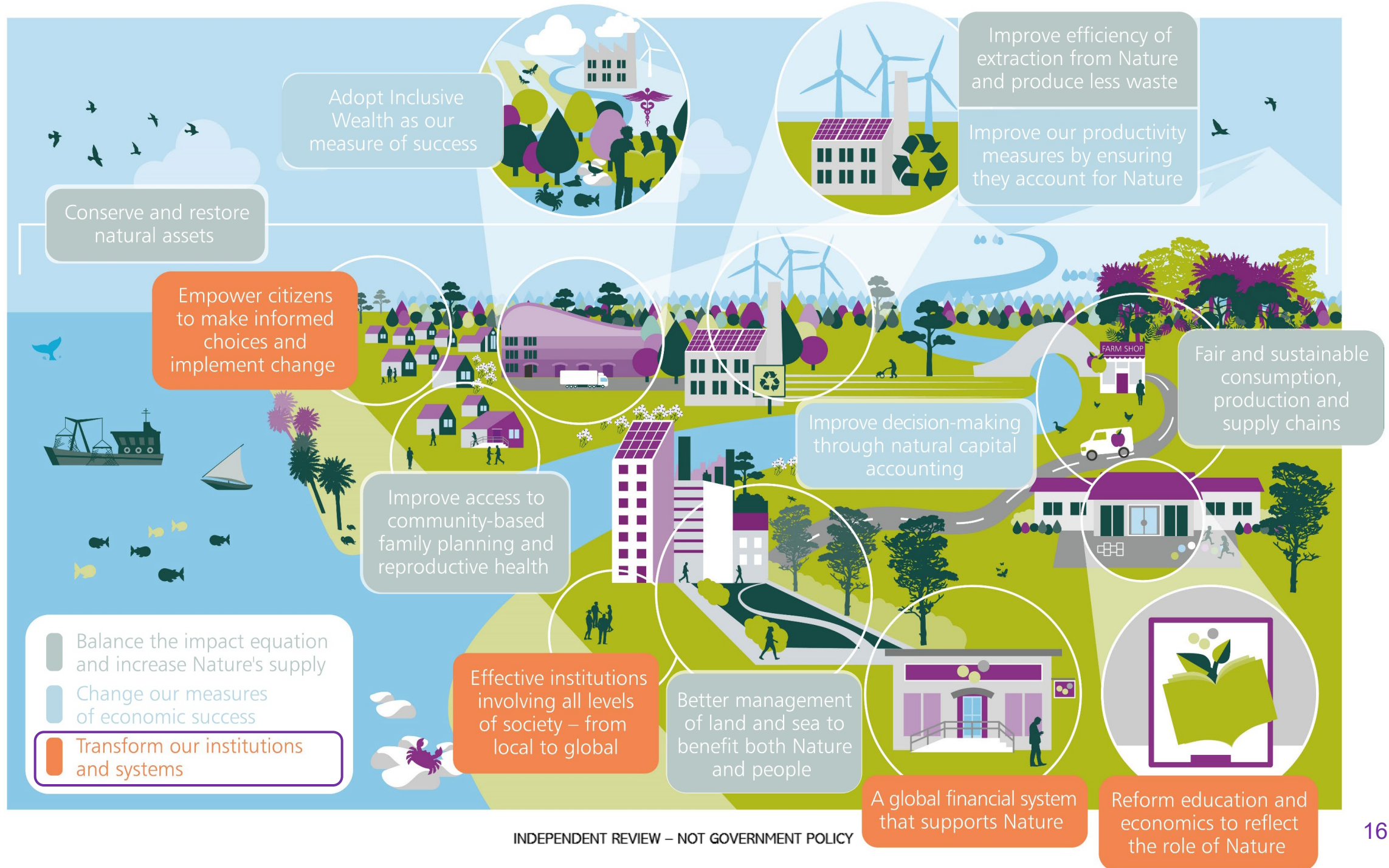


Three broad and interconnected transitions









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.



Q&A

#DasguptaReview

#EconomicsofBiodiveristy

Biodiversityreview@hmtreasury.gov.uk

For more information:

<https://www.gov.uk/government/collections/the-economics-of-biodiversity-the-dasgupta-review>