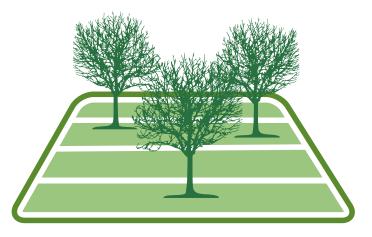


Land Use Futures Case Study

Objectives

The project aimed to use the "best available scientific and other evidence to take a broad look at the most important challenges and opportunities for land use in the UK over the next 50 years. What needs to be done to use and manage land more sustainably and to unlock greater value for people and the economy – now and in the future."



"The work was to look across different levels of governance, take account of spatial and geographical differences and review trends across the major land use sectors – including the built environment and infrastructure, natural resources, agriculture, conservation and leisure."

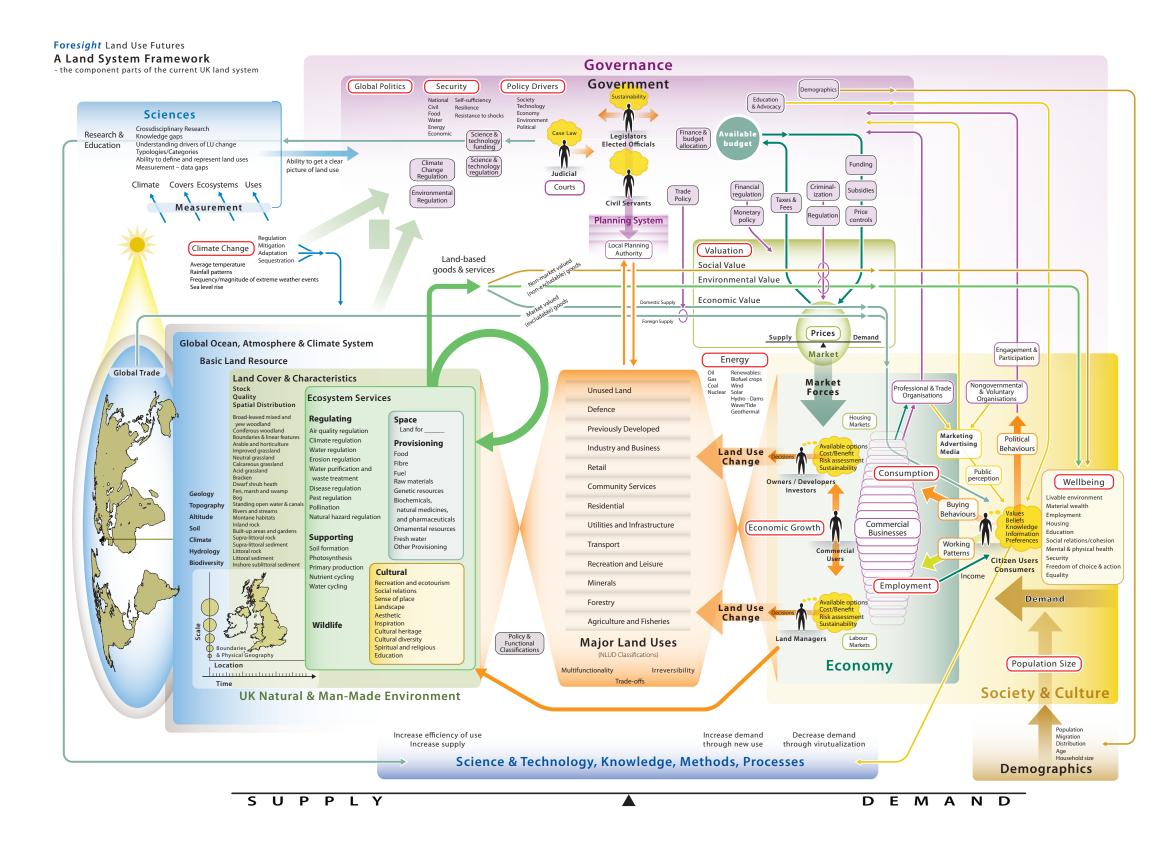
- Land Use Futures: Making the Most of Land in the 21st Century





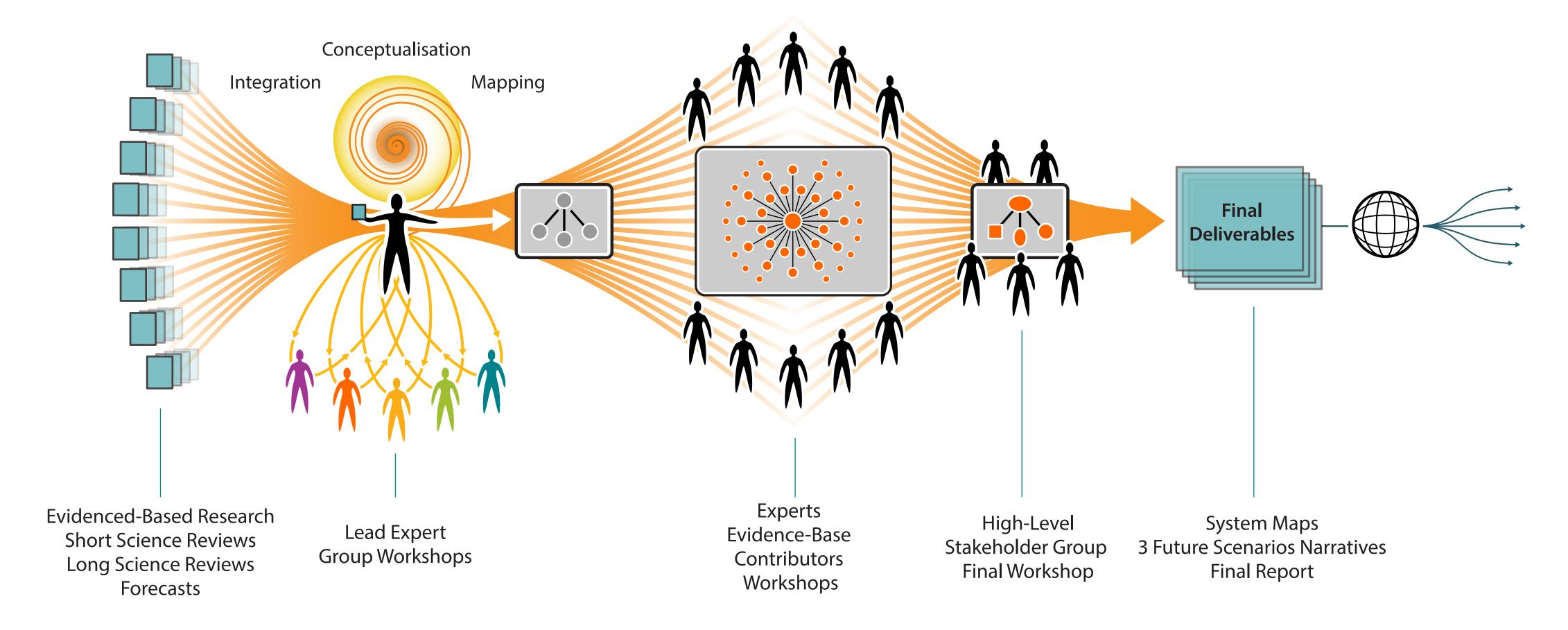


The stakeholder engagement over the system mapping work was aimed at creating shared understanding of the 'land system' across Government and across a diverse range of organisations, and to support these dialogues throughout the project.



The Land System Framework

A broad overview of the key elements and forces acting in the land use system.



Process

The project took **a systems approach** to clarify the broad nature of both the drivers and the impacts of land use change.

This process brought together key experts, practitioners and contractors. It was a **true collaboration between stakeholders from diverse disciplines**, including economics, policy, geography, planning, engineering, environmental science, conservation and climate change.

"Crucially, the analysis took an even-handed view – not to judge one type of land use to be more or less important than another. It also contrasted the perspectives which characterise different land use communities and different expert disciplines – acknowledging the reality that these viewpoints often conflict. There are many different 'systems' at work that are creating value."

The scenarios work followed a thorough and engaging process to identify drivers of change and critical uncertainties to define a scenario framework that provided the basis for the 3 final scenarios.

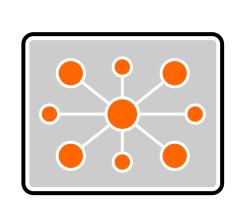
Our team worked continuously with all involved to understand and map the interconnected nature of this system.

Deliverables

From a series of evidence-based workshops, detailed diagrams were produced to conceptualise land use as a system of economic, social and environmental factors that interact to create outcomes on land. "The project refers to these interactions as the 'land system."

This integrated view of the whole land use system enabled policy-makers to understand drivers of land use and evaluate the impact of possible future interventions (or the lack of interventions) more effectively.

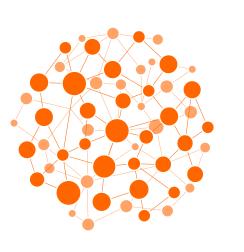
The value added by the diagram was described on the final report as:



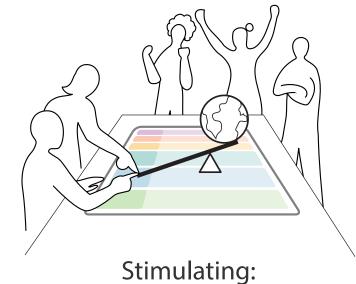
Showing: the 'bigger picture'



Integrating: specialists' knowledge



Communicating: complex information



Stimulating: stakeholder engagement

Funding

This work was contracted by Foresight in 2009/2010. The Foresight Programme in the UK Government Office for Science is under the direction of the Chief Scientific Adviser to HM Government. Foresight strengthens strategic policy-making in Government by embedding a futures approach. The work was undertaken by the Nexial team, as part of ShiftN.

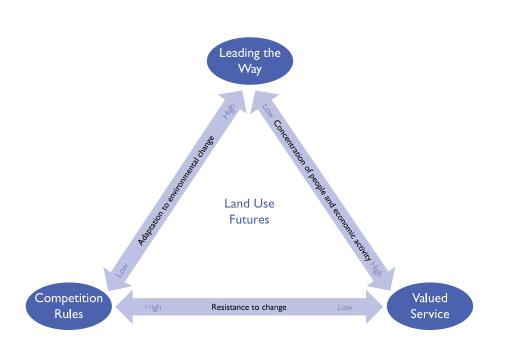


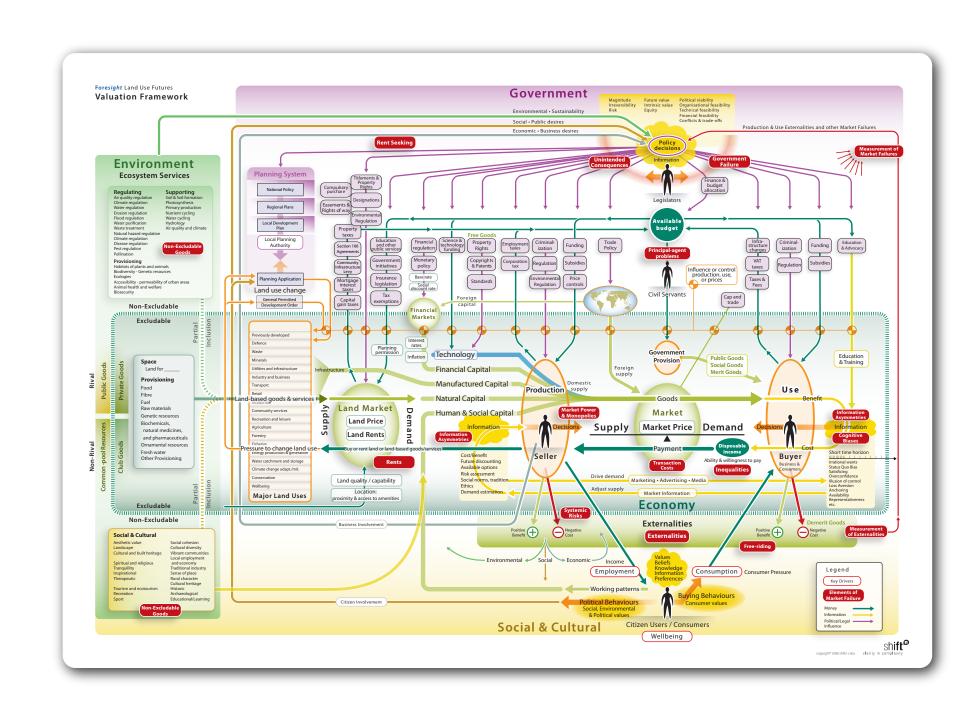
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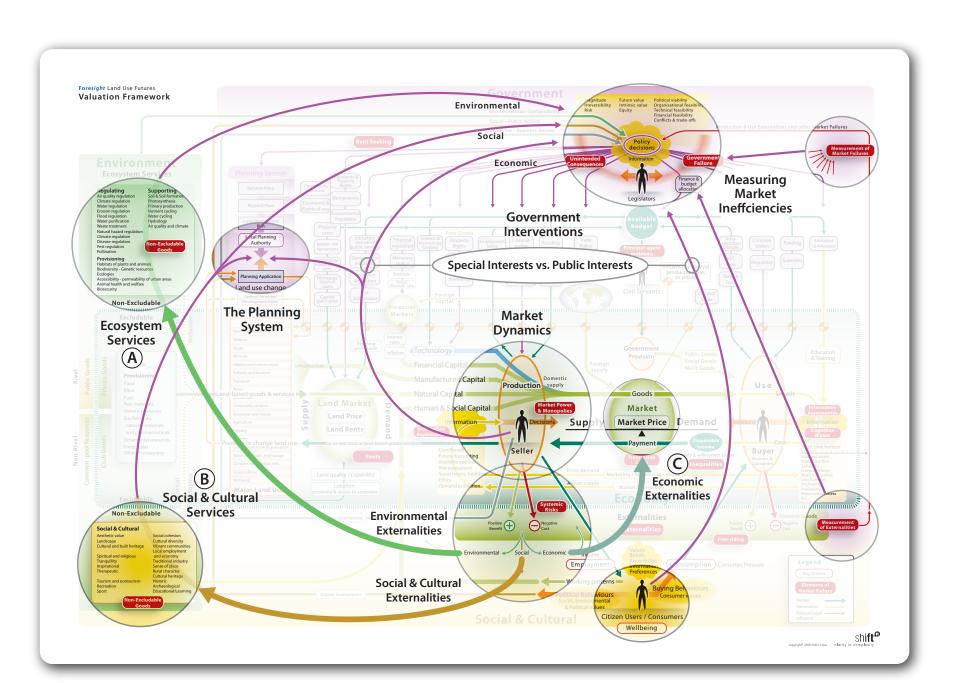
A Valuation Framework outlined market forces, governance mechanisms and market failures that may influence land allocation

Below:

A Scenarios Framework provided 3 important scenarios to inform future policy development







Key Insights

A range of systemic issues need to be addressed to meet future challenges.

The key insights were described in the official project report as follows:

- "How we value land, and the services it provides, is at the heart of decisions on land use change. A more sophisticated approach to valuing land needs to be embedded into governance mechanisms, including future incentives and regulation."
- The disconnect between institutional arrangements and private ownership.
- The need for **an overarching perspective**. Local decisions relating to development are heavily controlled, and are guided by planning policy that requires important issues such as the effect on the natural environment to be factored in.
- The need to better incentivise the provision of public goods and services.
- Aligning incentives and policy objectives.
- **Tensions between different parts** of the land use governance system.
- The need to **improve how conflicts are addressed** between different sectors, spatial scales and levels of governance.
- The scenarios work made clear to policy-makers the importance and urgency of recognising that **short-term land use decisions could have irreversible long-term consequences and produce 'tipping points'**, which may lead to a less desirable scenario of unsustainable development.

Global, Macro, Exogenous Drivers Social & Technological Evolution Land System Legislation Farming Water Commercial Development Atmosphere Transportation Forest/ Housing Decision Making Frameworks Recreation Paradigms & Assumptions Paradigms & Assumptions

For more information:

https://www.gov.uk/government/collections/land-use-futures

Contact us at: info@nexial.co

Above:

The conceptual framing that guided the project and development of the detailed system maps

Right:

Land System Influence Diagram

