UNIVERSITY OF CAMBRIDGE

Department of Land Economy

Environmental land management: connecting ecosystems and agricultural economics

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Environmental land management: connecting ecosystems and agricultural economics

- An environmental land management system
  - Setting reference levels
  - Focus on places: an architecture for governance structures
  - Procurement: finding a price
  - Adaptive governance
  - Longer term aspects:
    - securing investments,
    - promoting financial discipline
- Conclusions

1. Setting a reference level and a ‘good practice’ standard

- Loss of cross-compliance leverage
- Shifting demands on environment and judgements on ‘good stewardship’
- Historic shifts: SSSIs & water quality
- Future challenges: GHG emissions and carbon in soils
- Present opportunity:

  Are ‘public goods’ really ‘private goods’?

  Are ‘pubic goods’ really avoided ‘bads’?

‘Public goods’ in ‘Health and Harmony’

- ‘Could include’:
  - Improved soil health
  - Improved water quality
  - Better air quality
  - Increased biodiversity
  - Climate change mitigation
  - Enhanced beauty, heritage and engagement with the natural environment
  - World-class animal welfare
  - High animal health standards
  - Protection of crops, tree, plant and bee health
  - Improved productivity and competitiveness
  - Preserving rural resilience and traditional farming and landscapes in the uplands
  - Public access to the countryside
- But not mentioned:
  - Flood control
  - Food security
  - Rural employment


Department
for Environment
Food & Rural Affairs

Health and Harmony: the future for food, farming and the environment in a Green Brexit

February 2018

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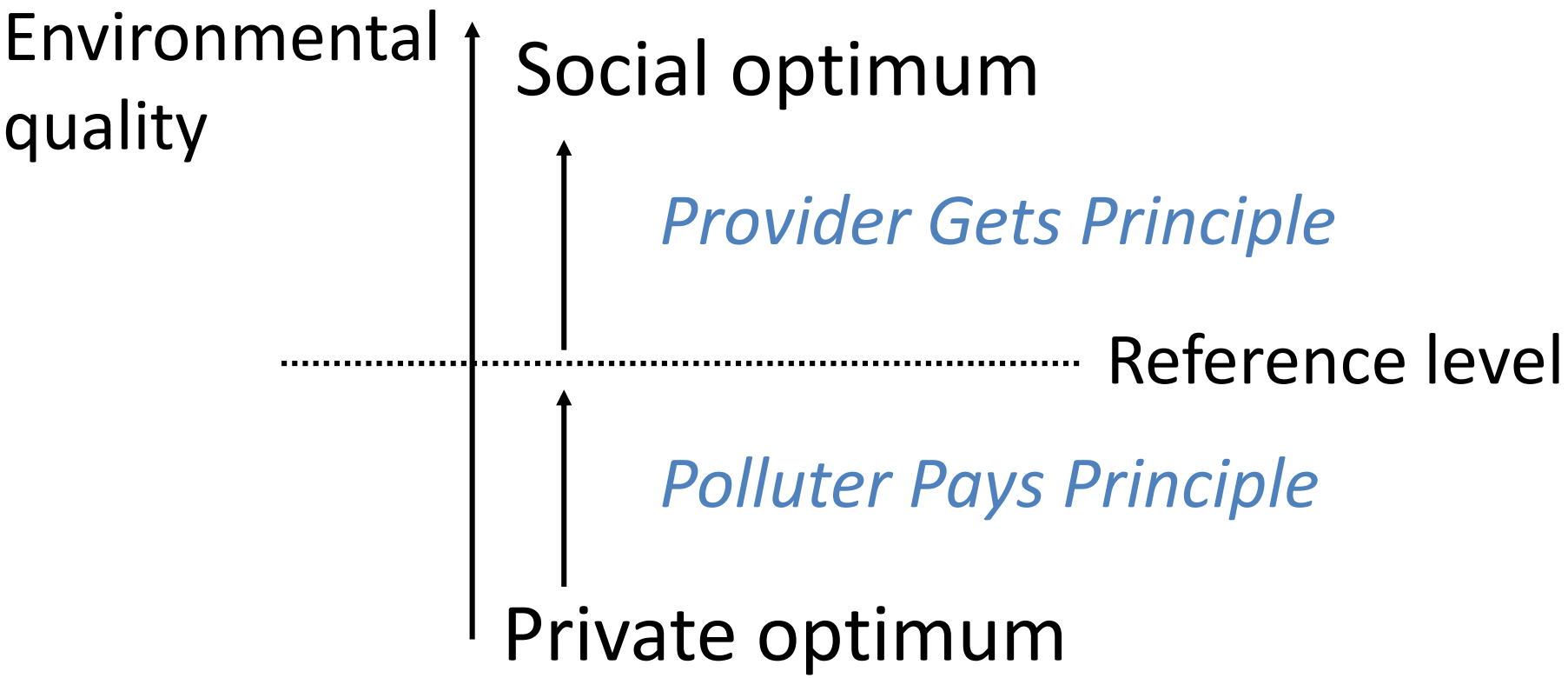
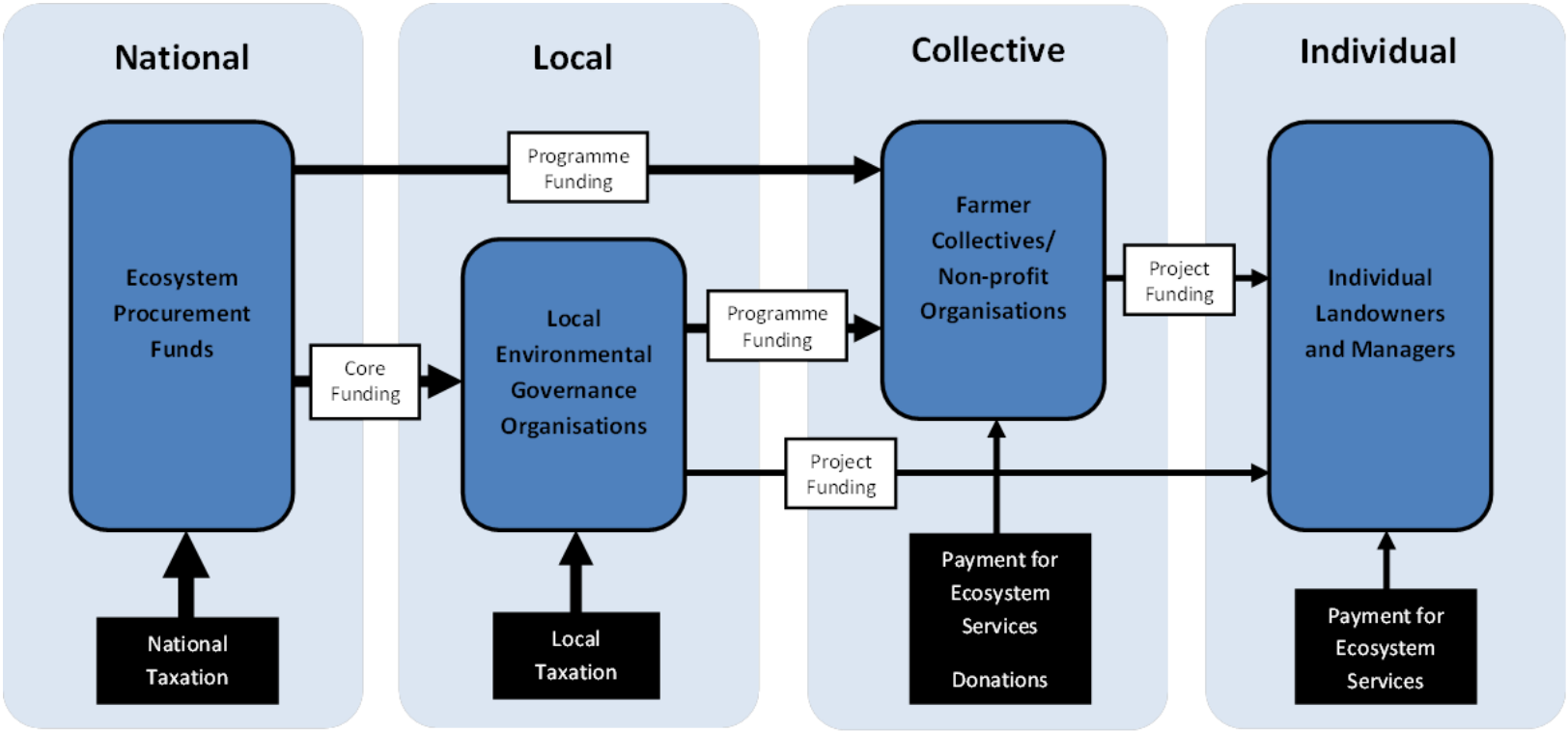
The reference level of property rights



2. Focus on places: an architecture of governance

- Objective to maximise social returns to land
- The centre cannot know best at local level
  - Local physical, economic and social contexts
  - Direct costs and opportunity costs of provision
  - Economies of scope and co-benefits in ecosystem delivery
- Limits to valuation and ability to convey value information across scales
- Subsidiarity: devolving decisions to those most affected
- Re-emphasising deliberative dialogue
- Local Environmental Governance Organisations

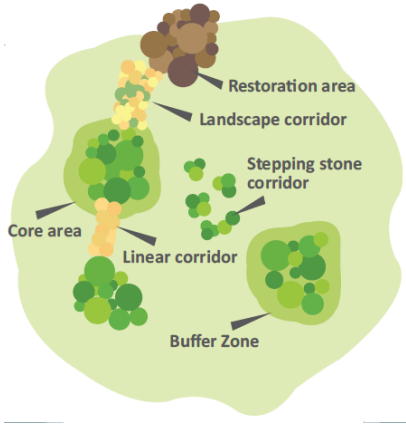
An architecture of ecosystem governance



Local Environmental Governance Organisations (LEGOs)

- Responsibility for ecosystem sustainability and ecosystem delivery at local level
- 'Owner' of the ecosystem: Social residual claimant
  - Acts as trustee for local community
  - Represents local values and ecosystem demands
  - Fills in gaps from national policy
- Administers local procurement fund

Collective and partnership supply: economies of scale



- Largescale conservation e.g. clusters
- Scheme-making within local areas
  - Flood control, peatland restoration, catchment water quality, rewilding …
- Supported by intermediaries and facilitation (eligible for public funding where enhance ecosystem outcomes)
- May be co-funded by government and beneficiaries

3. Procurement: Finding a price

- Not the social value of the public good output or income foregone
- Procurement approach: marginal cost of delivering outcome
- This supports loss-making farming where needed to generate public benefit
- Land managers' bids include Willingness to Accept (cf US Conservation Reserve Program)
- Incentives for co-ordination and partnership

Integrating across ecosystem services: economies of scope

- Integration amongst ES by land managers
  - They have best information
- Individuals and collectives hold portfolios of ES delivery contracts
- Tendering towards marginal cost for incremental delivery
- Collectives hold contracts through longer-term programmes

4. Adaptive governance of social-ecological system

- Uncertainty (ignorance) on outcomes from ecological and institutional interventions
- Reliance on natural and social capital (partnerships bringing entrepreneurship, skills, resources)
- Collaboration established through formal contracts and trust
- Interventions as experiments: monitoring, assessment and feedback

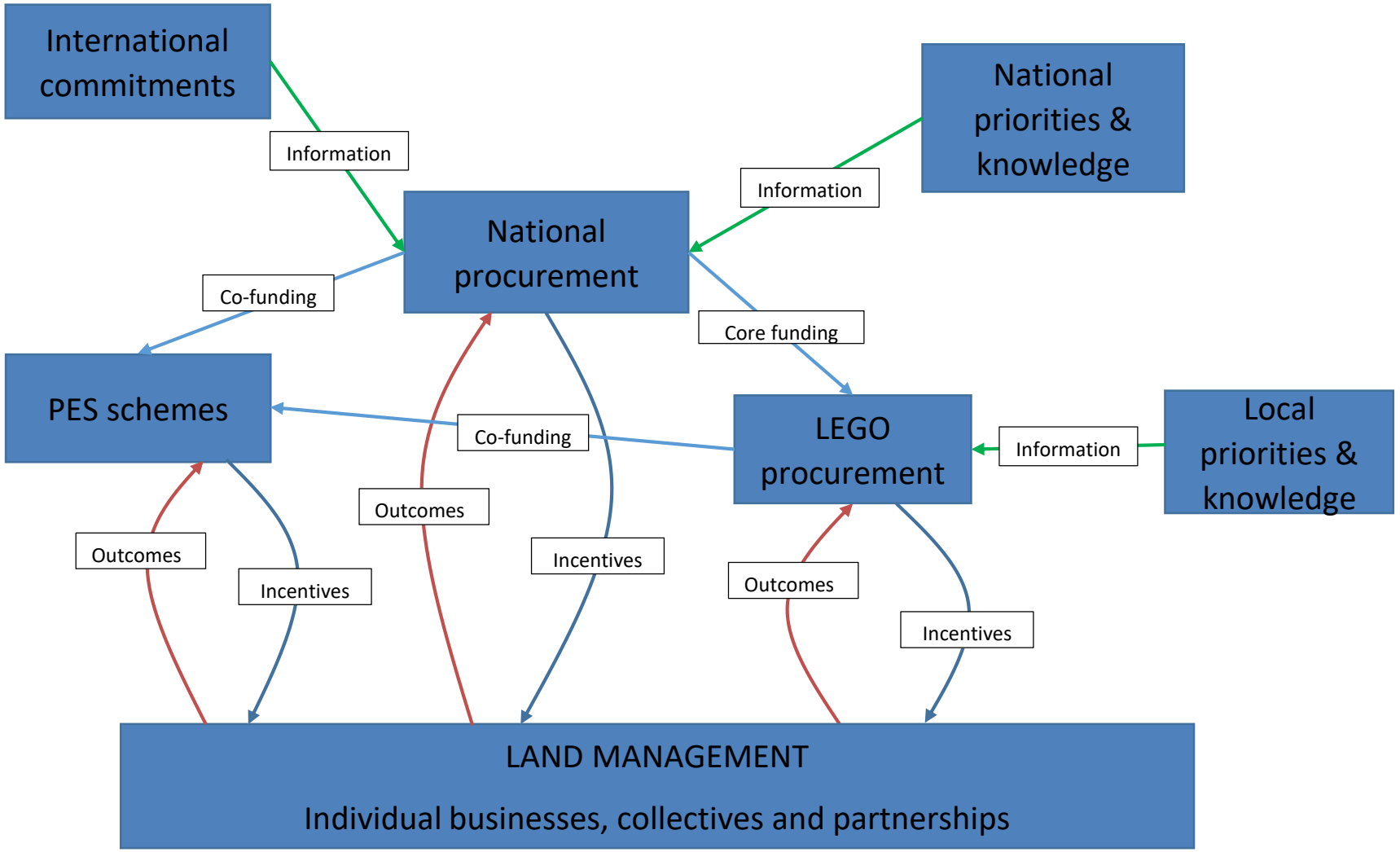
5. Securing investments in natural and social capital in the longer term

- Short term planning in Pillar 2
- Fluctuations in agricultural returns
- Long term investment in ecological restoration
- Time taken to build partnerships/ social capital
- Need for secure institutional underpinning
  - Legally robust partnerships
  - Non-profit and public land ownership
  - Conservation covenants

6. Reconciling financial discipline and long term governance

- Short-term competitive projects for financial discipline, but:
  - Creates need for (new, artificial) targets (ex ante)
  - Success judged against those targets (ex post)
  - Transactions costs of regular competitive application
- Ecosystem restoration is long term with uncertain outcomes, need:
  - Freedom to allow ecological and social systems to develop
  - Time and opportunity to experiment, learn and respond
- Programme funding
  - Building longer-term relationships between funders and fundees
- Qualitative reviews of progress for accountability

Social rural land management system



Implications

- Accept limits to centralised decisions: greater emphasis on governance structures to form and reveal values and determine and implement plans
- Promote co-ordination and engagement amongst landholders and other stakeholders to achieve economies of scale and scope – local scheme-making
- Longer term funding programmes in support of natural and social capitals
- Judge performance by qualitative judgement as well as cost-effective metrics

Further work

- Mapping and co-ordinating networks of local groups across different ES
- More research and development on governance approaches
- Refining competitive funding mechanisms for procurement at marginal cost
- Developing approaches to longer term programme funding and qualitative assessment
- Understanding potential and limits of PES schemes, risks of crowding out, etc.

Conclusions

- Longer term vision for a ‘social land management system’ but set direction now
- Develop governance institutions over time
- Build on local stakeholder groupings
- Develop procurement schemes
- Optimal intensity of governance depends on values and degree of competition over local natural capital

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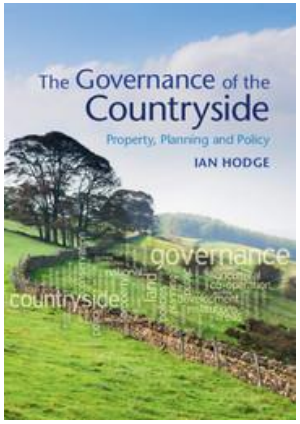
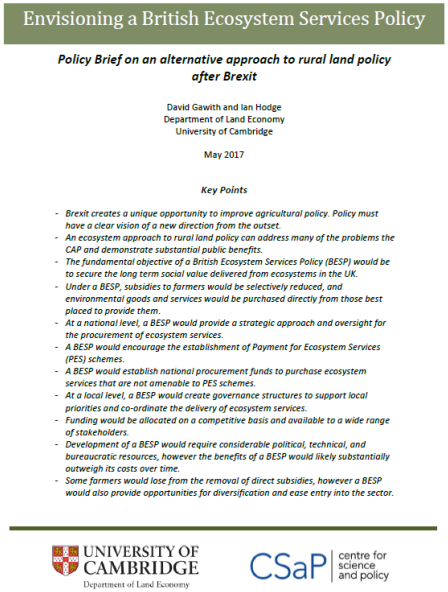


Cambridge University Press 2016



Envisioning a British Ecosystem Services Policy

Policy Brief on an alternative approach to rural land policy after Brexit

David Gawith and Ian Hodge
Department of Land Economy
University of Cambridge

May 2017

Key Points

- *Brexit creates a unique opportunity to improve agricultural policy. Policy must have a clear vision of a new direction from the outset.*
- *An ecosystem approach to rural land policy can address many of the problems the CAP and demonstrate substantial public benefits.*
- *The fundamental objective of a British Ecosystem Services Policy (BESP) would be to secure the long term social value delivered from ecosystems in the UK.*
- *Under a BESP, subsidies to farmers would be selectively reduced, and environmental goods and services would be purchased directly from those best placed to provide them.*
- *At a national level, a BESP would provide a strategic approach and oversight for the procurement of ecosystem services.*
- *A BESP would encourage the establishment of Payment for Ecosystem Services (PES) schemes.*
- *A BESP would establish national procurement funds to purchase ecosystem services that are not amenable to PES schemes.*
- *At a local level, a BESP would create governance structures to support local priorities and co-ordinate the delivery of ecosystem services.*
- *Funding would be allocated on a competitive basis and available to a wide range of stakeholders.*
- *Development of a BESP would require considerable political, technical, and bureaucratic resources, however the benefits of a BESP would likely substantially outweigh its costs over time.*
- *Some farmers would lose from the removal of direct subsidies, however a BESP would also provide opportunities for diversification and ease entry into the sector.*

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CSaP centre for science and policy

Policy brief: "Envisioning a British Ecosystem Services Policy" 2017

www.csap.cam.ac.uk/links/13/4839