

The future of natural capital

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Valuing our life support systems

Natural Capital Initiative

British Library

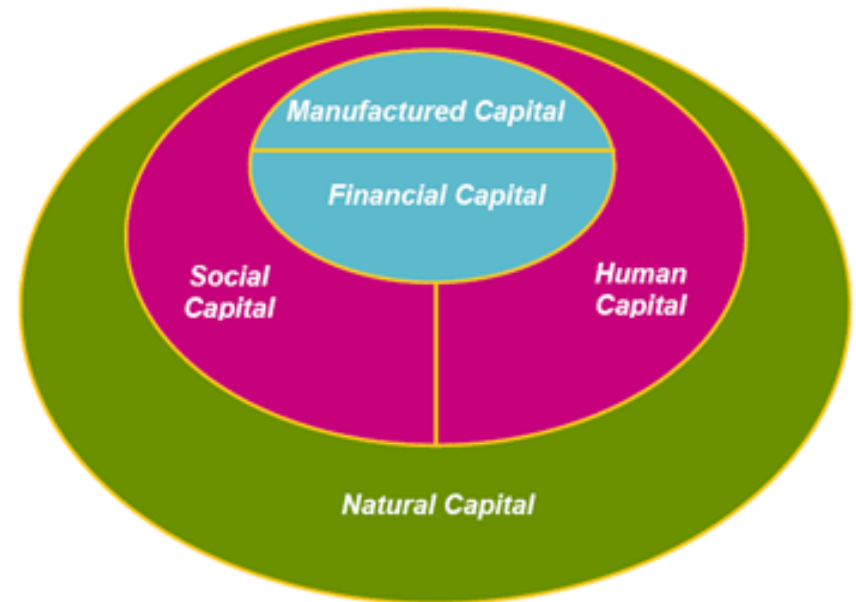
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Natural capital – an inclusive framing for environmental sustainability.

..becoming established at many levels – in government, business, NGOs and communities.

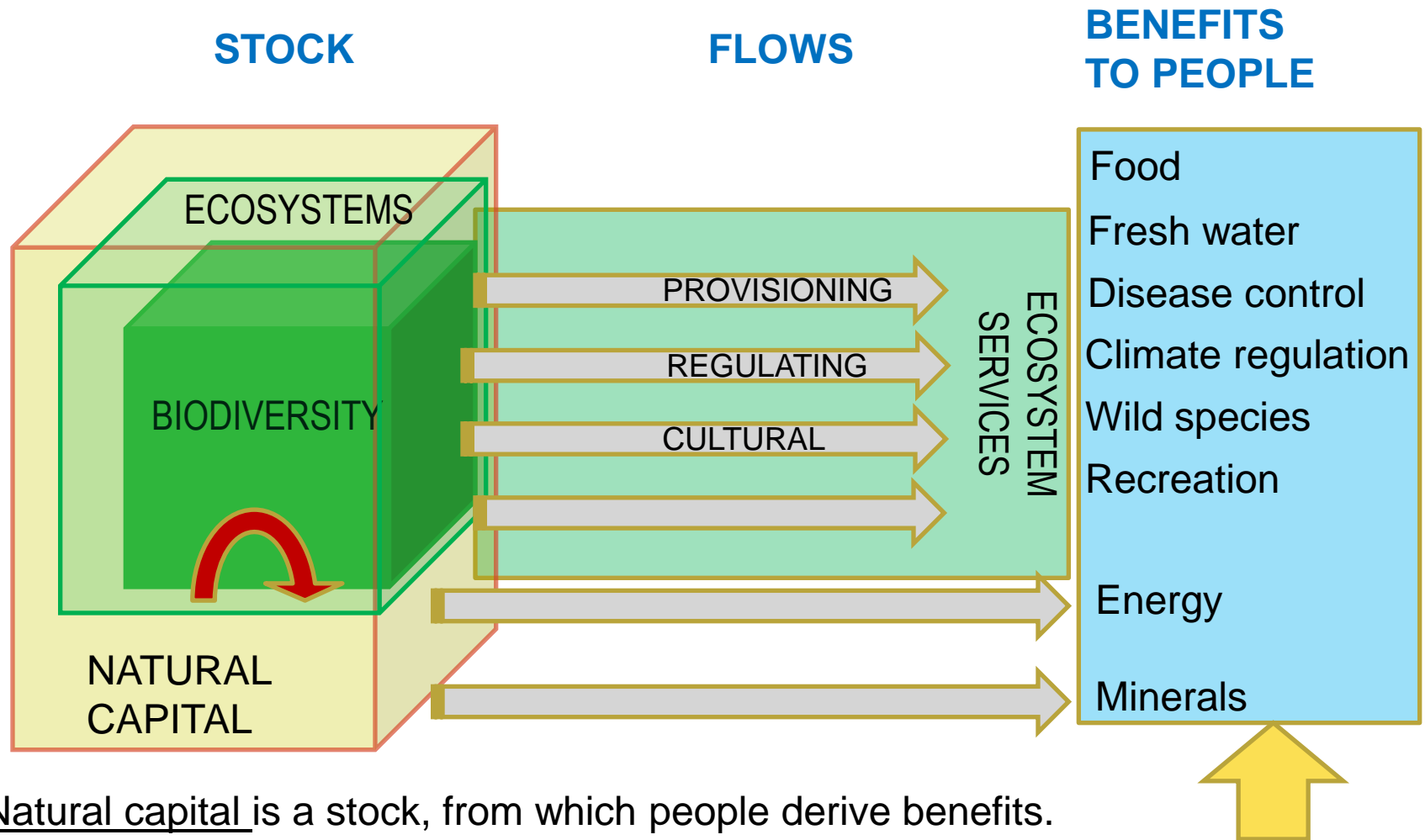
But what do we need to do in order to?

- embed the ideas in practice and
- ensure they deliver what we intend?



1. A more common understanding of concepts, terms and principles





Natural capital is a stock, from which people derive benefits. One subset of the stock of natural capital is ecosystems, and the benefits are then called ecosystem services

Other capital inputs

2. Natural capital is for people

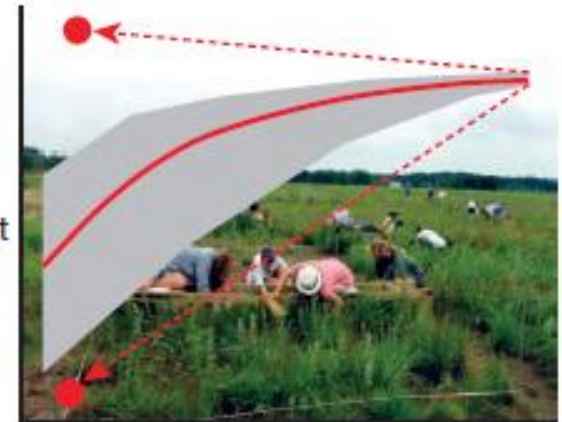
Natural capital is centrally about people, so need to agree:

- a. What natural capital is, and how we measure it and its benefits
- b. Values and valuation are for people: monetary & non-monetary approaches are necessary
- c. What are the targets for benefits (what people want and need)
- d. Equity & fairness; who decides, who receives what, where, when
- e. Important to think about demand side (in society) as well as supply side (in ecosystems)

3. Ecology matters

- Processes
- Thresholds and targets
- Location matters
- Multifunctional demands on land and sea
- Different scales of space and time

Ecosystem function
(resource capture,
biomass production,
decomposition, nutrient
recycling)



Biological diversity
(variation in genes, species,
functional traits, habitats)

Cardinale et al. 2012 Nature

4. Almost all benefits from natural capital are co-produced by people, with other capitals,

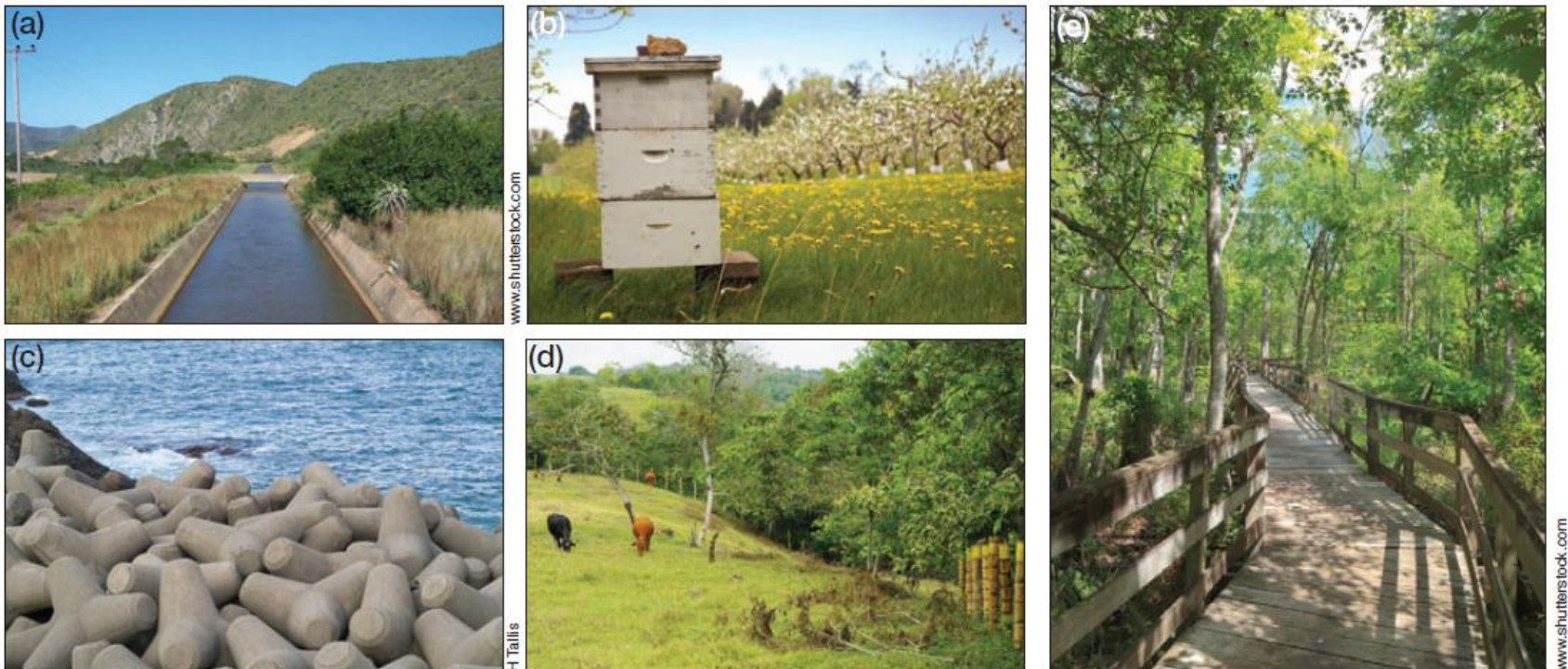


Figure 2. Accurately modeling the production of most ecosystem services requires the inclusion of social–ecological production functions that take into account social factors underpinning ecosystem services; for example: (a) irrigation canals that deliver water for food production in dry regions, (b) beehive management for pollination and fruit production, (c) engineered infrastructure to enhance coastal protection services, (d) grazing management and fencing to protect riparian areas for water services, and (e) trail infrastructure and maintenance to enhance recreation services.

Unresolved issues

- Valuation – monetary, health and wellbeing. Intrinsic values?
- Equity and fairness
- Accounting for natural capital versus valuing ecosystem service benefits
- Turning valuation into making better decisions
- Opportunities to be realised

Thank you for listening

