Natural Capital Quick Start Guide #1

What is natural capital and why is it helpful?

Natural capital: Definition

Natural capital refers to the aspects of the natural environment that provide benefits to people. The benefits are wide ranging and can be anything from clean air and water, wildlife to enjoy, to crop pollination. The environment's contribution to these benefits are referred to as ecosystem goods and services. These benefits can be valued.

A formal definition of natural capital from the Natural Capital Committee is *"the elements of nature that directly or indirectly produce value to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions."*

Why is it helpful?

Decisions in the public and private sectors are often based on the expected economic costs and benefits of different options. The environment provides a wide range of important benefits, but without quantification these are difficult to include. Thus the natural environment can be forgotten about. Therefore, natural capital seeks to define, quantify and value these benefits in ways that are familiar to people engaged with economics and decision making.

Using the natural capital concept can help us recognise, demonstrate and promote the benefits that the natural environment provides. We can explain these benefits to land managers, planners, policy makers, businesses and other decision makers, either using natural capital language or plain English, depending on who we are talking to.

The approach draws our focus to the state of our natural assets and their ability to produce multiple benefits in the future. We can use evidence to support decisions which invest in the environment for long term resilience, ensuring future generations can enjoy a full-suite of benefits necessary for wellbeing.

Logic Chains

Natural Capital thinking is often expressed as a logic chain, where a **stock or asset** of natural capital enables the provision of **ecosystem services**, which provides **benefits** that we can **value**.

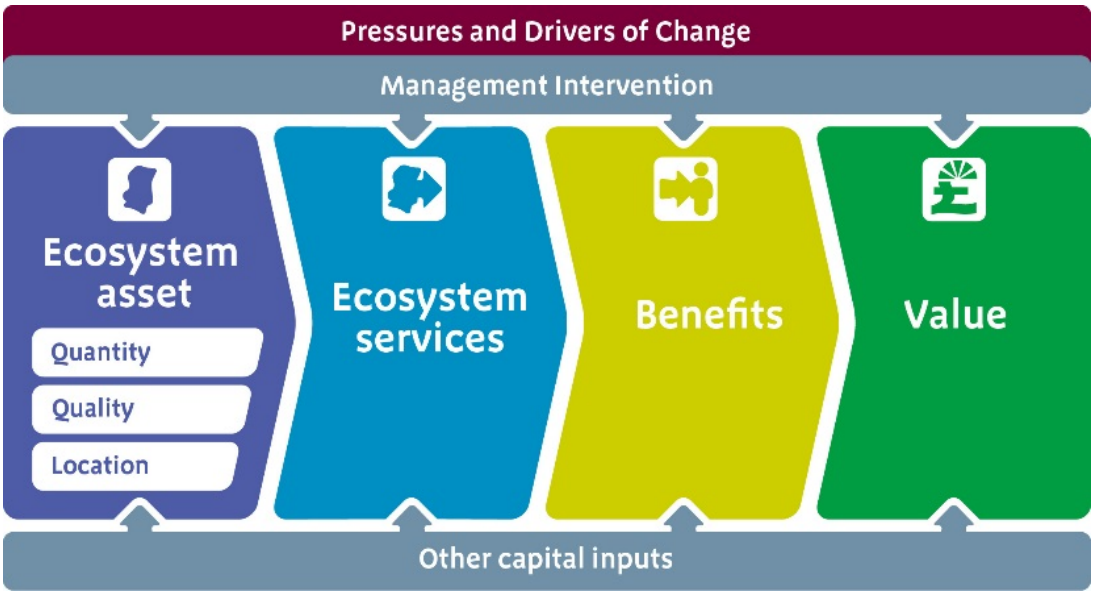

Image from Sunderland et al., 2019

Quantity, **quality** and **location** are important components affecting the condition of ecosystem assets. In turn, the condition or state of the asset impacts on the capacity to continue to sustainably provide **ecosystem services** and their associated **benefits** into the future.

Pressures and drivers of change, such as climate change, pollution, or population increases can impact upon the state of assets and the benefits received by society. Different types of **management** also affect the state of assets and benefits. Other **capital inputs** are normally necessary to produce the benefits. For example, to be able to enjoy a local woodland we may need a footpath through the woodland and transport to get there.

Valuing benefits

Values of benefits can help decision-makers consider the environment and its role for people and the economy.

Some of the benefits that the natural environment provides are traded. They have a market value, for example, timber. However, many benefits are external to the market and people enjoy them for free, for example, clean air or natural flood regulation. Because they have no market value, these public benefits are often ignored in decision-making. Valuing all the benefits helps decision-makers consider all ecosystem services, for example when deciding between clear felling a woodland to sell for timber, or leaving the woodland to provide flood regulation and recreation benefits.

The Economics of Ecosystems and Biodiversity (TEEB) approach helps decision-makers recognise, demonstrate, and where appropriate, capture, the values of ecosystems and biodiversity. It suggests three levels that may be used, according to the situation. Recognising the value to society, for example the value of a park to a local community, may be sufficient. Demonstrating the value in economic terms through cost benefit analysis can help to inform decisions. It is important to note that it is only possible to place an economic value on some benefits, so decision-making needs to be informed qualitatively as well. Finally the potential value is captured when it is delivered to society. This can involve decisions made on public policy, or by business or the third sector. It may involve market-based solutions suitable for solving environmental problems, for example, when communities pay land managers to reduce the risk of flooding. The Valuation Quick Start Guide provides more information about economic valuation of benefits.

Summary

- Natural capital means “the elements of nature that directly or indirectly produce value to people”.
- A natural capital approach may help to recognise, demonstrate and promote the benefits that the natural environment provides, potentially allowing better inclusion of the environment in decision making.
- A natural capital logic chain demonstrates a simplified relationship between natural capital assets, the ecosystem services they provide, the benefits we realise from these and the value of these benefits.
- Not all benefits can be valued in monetary terms, so including qualitative information, on non-monetised benefits, is imperative.

This guide was produced by a team of natural capital specialists at Natural England.