



QUICK READS:

NATURAL CAPITAL INTRODUCTION

IN A NUTSHELL

Our economy depends on society and nature creating the conditions for us to succeed. We take these gifts for granted and assume they will continue to be free forever. This is not the case. The current environmental crisis clearly demonstrates that Planet Earth has limits and is under severe pressure. The concept of “natural capital” provides a way to understand the value nature provides and our dependence on it. This is similar to way we understand other forms of capital – like financial.

Natural capital is defined as the stock of natural assets (air, water, land, habitats) that provide goods and services which benefit society, the economy and business. Natural capital provides goods and critical “ecosystem services” essential for a functioning economy and society. As illustrated, these include fresh water, productive land for food and fibres, fish, fuels, minerals, sequestration of greenhouse gas (GHG) emissions, clean air, flood defences, plants for pharmaceuticals, biodiversity and recreation.



Examples of Nature’s Services (Source: Valuing Natural Capital, Future Proofing Business and Finance p. 36, ©2015, Maxwell, D.)

Much of this capital, such as fresh water, forests and biodiversity, are being depleted at an alarming rate. Critical support systems such as the ability to regulate the climate are failing. This is largely because our current economic systems treat the social costs or benefits of nature’s services as externalities not adequately captured in the market. This is despite their vast economic and social value. Regulation and markets are slowly internalising these externalities as sustainability challenges grow more urgent. As a result, there is a growing demand from governments, businesses and investors to value and account for natural capital risks and



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opportunities. This can support mitigating risk, securing scarce resources, creating long term value and enabling a more resilient economy.

KEY DEFINITIONS

Definitions for key terms relating to natural capital include:

- Biodiversity – the variability among living organisms within and between species and ecosystems. Biodiversity is crucial for healthy ecosystem services.
- Ecosystem services – the direct and indirect value or benefits people receive from ecosystems. These services are divided into three types: **provisioning** e.g. food and fresh water, **regulating** e.g. climate regulation and **cultural** e.g. recreation and aesthetic.
- Externalities – the consequence of an activity that affects parties other than the organisation undertaking the activity, for which it is neither compensated nor penalized through the markets. Externalities can be positive e.g. payments for protecting a watershed or negative e.g. health problems for local residents associated with air pollution from a factory.

KEY POINTS

- More than 60 per cent of the vital services provided by nature are in global decline because of overexploitation. We are using the equivalent of 1.5 planets that we do not have.
- It is increasingly recognised that our current capitalist economic systems do not adequately capture the costs or benefits of natural capital which drives this over exploitation.
- Natural capital valuation and accounting provide the tools to integrate natural capital risks and opportunities into government and business decision making.

CONSENSUS

Capitalist economic models assume an infinite supply of natural resources and functioning ecosystems. There is increasing recognition that this is flawed. The success of national economies and business are dominated by financial measures such as Gross Domestic Product (GDP), profit and revenues. Wider non- financial measures of success such as societal wellbeing, resilient ecosystems and available resources are often not factored in. One of the main drivers for integrating natural capital considerations in policy and business is to understand the risks and opportunities from growing resource scarcity, lack of biodiversity and increasingly erratic weather conditions associated with climate change.

The growth in Green Economy and Green Growth policies aim to address a variety of the market, policy and institutional failures that drive natural capital degradation. To support this, natural capital valuation and accounting methods have been developed and are growing in application. For example, the UN System of Environmental and Economic Accounts (SEEA) is the internationally agreed accounting standard. At EU and Ireland level, we apply this via the EU Mapping and Assessment of Ecosystem Services framework. This approach aims to enable policy tools such as natural asset pricing, setting resource targets and taxation to be developed. It also supports new markets driving carbon reductions, conservation of biodiversity, water, forests and sustainable investment. For business and investors, methods such as the Natural Capital Protocol provide valuation and accounting frameworks. Uptake is slow in business as disclosure and reporting on natural capital is not yet mandated though financial accounting regulatory frameworks.



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POINTS OF DIVERGENCE

A common criticism of financially valuing nature's services is that it will lead to commoditising or privatising nature. That is not the intent, however these unintended consequences need to be taken seriously as standard methods and accounting systems are developed and implemented.

The purpose of assigning a financial value is not to change the fundamental value of nature - which is arguably priceless - and many ecosystem services are irreplaceable. Having a financial value for natural capital shared by society at large, as distinct from being perceived as "free" can shift behaviour away from degradation to restoration.

REFERENCES

- [EU Mapping and Assessment of Ecosystem Services](#)
- [Natural Capital Coalition and Natural Capital Protocol](#)
- [Valuing Natural Capital, Future Proofing Business and Finance](#), Quick Primer
- [UN System of Environmental and Economic Accounts \(SEEA\)](#)