

Valuing ~~Natural Capital~~ for the Future

Farmland



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NATURAL
CAPITAL
IRELAND

What is currently valued on farms?



Getting the farm valued – what's involved

Most farmers will at some point contact an auctioneer or other professional to have a valuation of the farm carried out. Here's what happens.



Paul Mooney

PROPERTY > PROPERTY

5 January 2022



The land type will influence the value of the land. This land is from a 51ac parcel Quinn Property offered in September 2021 near Tinahely.

Trees and shelter

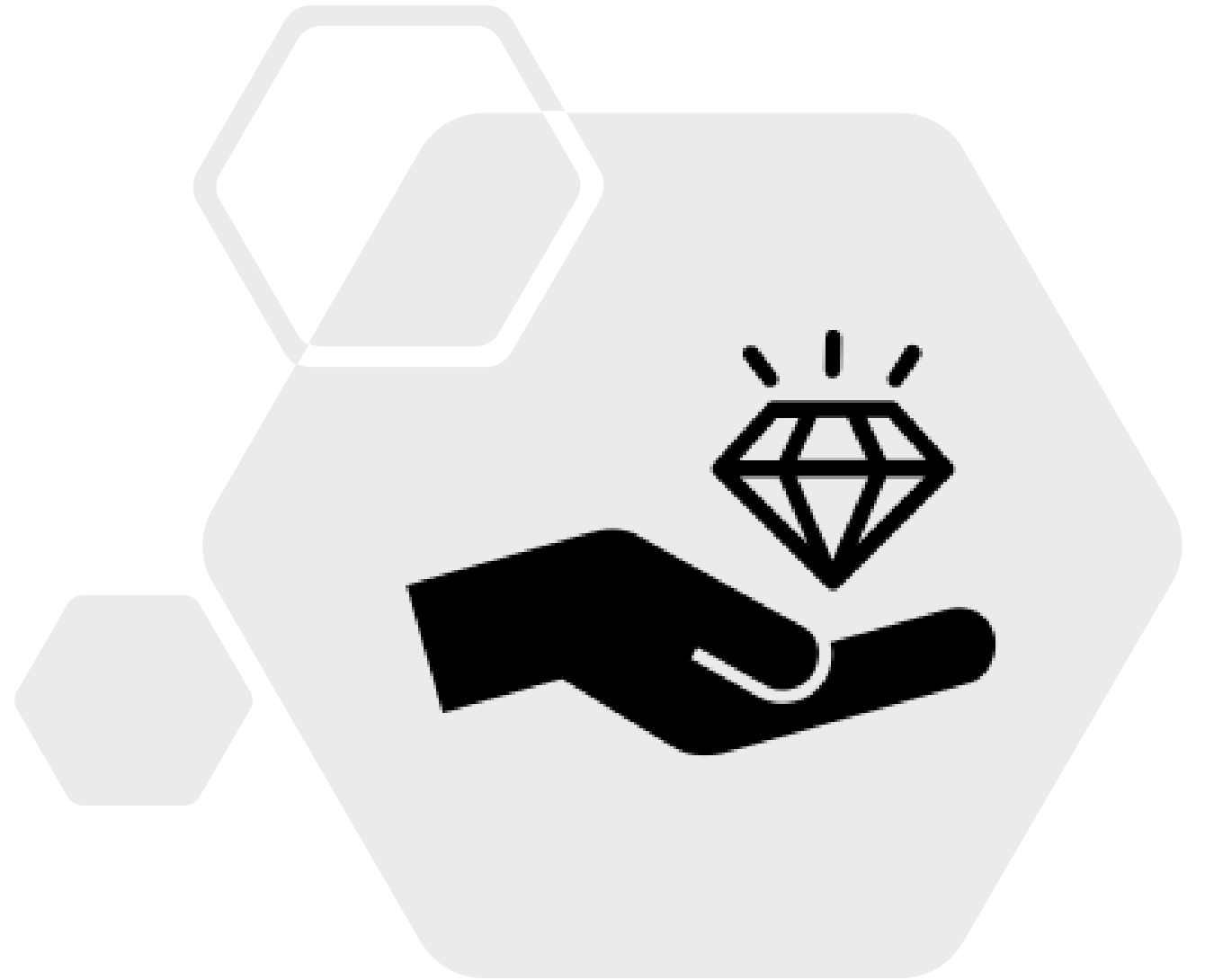
Having plenty of mature trees and large hedging on a farm **may or may not add to value.** They are not suited to tillage farming or intensive dairy farming. But they can suit cattle and sheep farming.

Designation

Designations such as SAC and Hen Harrier tend to have a negative effect on land value. But such land is often of **marginal quality anyway.** Designation brings rules and restrictions on what farming activities can be carried out. In many areas, the value of designated land is in the region of €2,000/ac to €4,000/ac.

What is value?

1. “the regard that something is held to deserve; the importance, worth, or usefulness of something.”
2. “principles or standards of behaviour; one's judgement of what is important in life.”



Value implies the worth of the good or service for an individual.

Price is the amount of money paid by the buyer to the seller in exchange for any product and service.









€2



€20

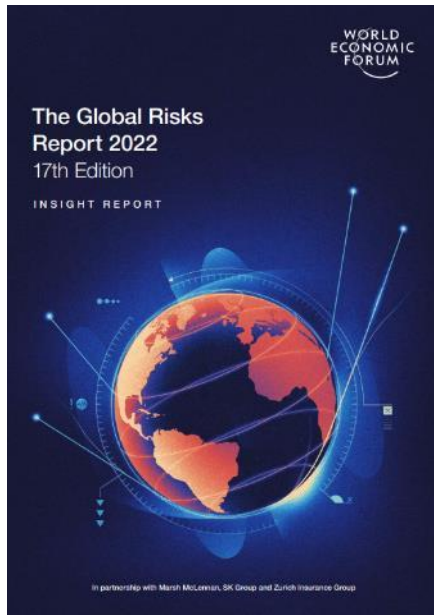


Value of nature

-  human existence
-  direct contribution to human health
-  In-direct contribution to human health
-  goods and services on which we depend
-  Knowing that it exists
-  Sacred to us/moral worth

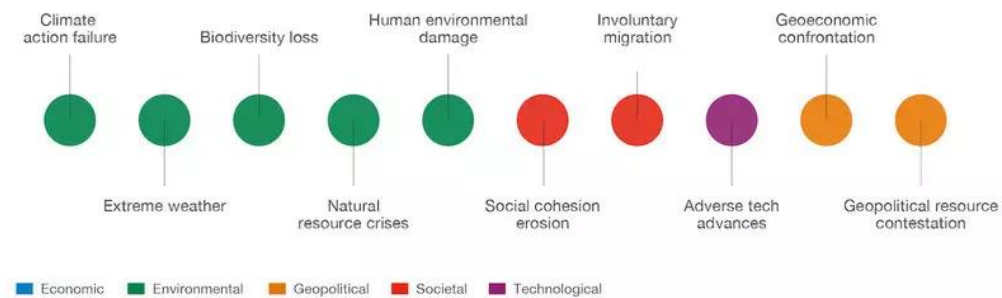






Top Long-Term Global Risks

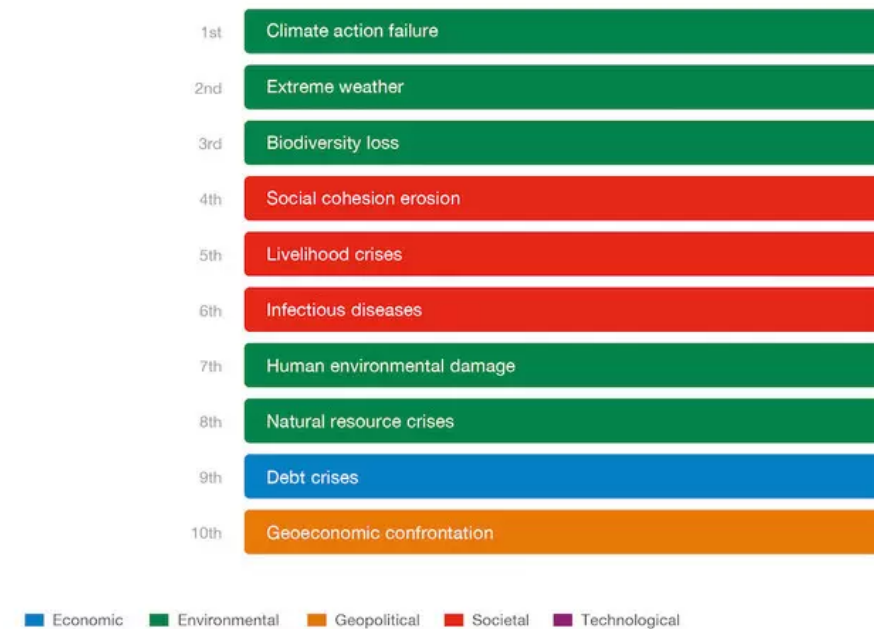
Over the next 5-10 years



Source: World Economic Forum Global Risks Report 2022

Top 10 Global Risks by Severity

Over the next 10 years



Source: World Economic Forum Global Risks Report 2022







Farmers' goals and values



Total value of nature

- ✓ Marketed goods: price can be used as a proxy
- ✓ Non-market goods: use, preference, replacement costs can be used as proxies
- ✓ Everything else: no price, but doesn't mean no value



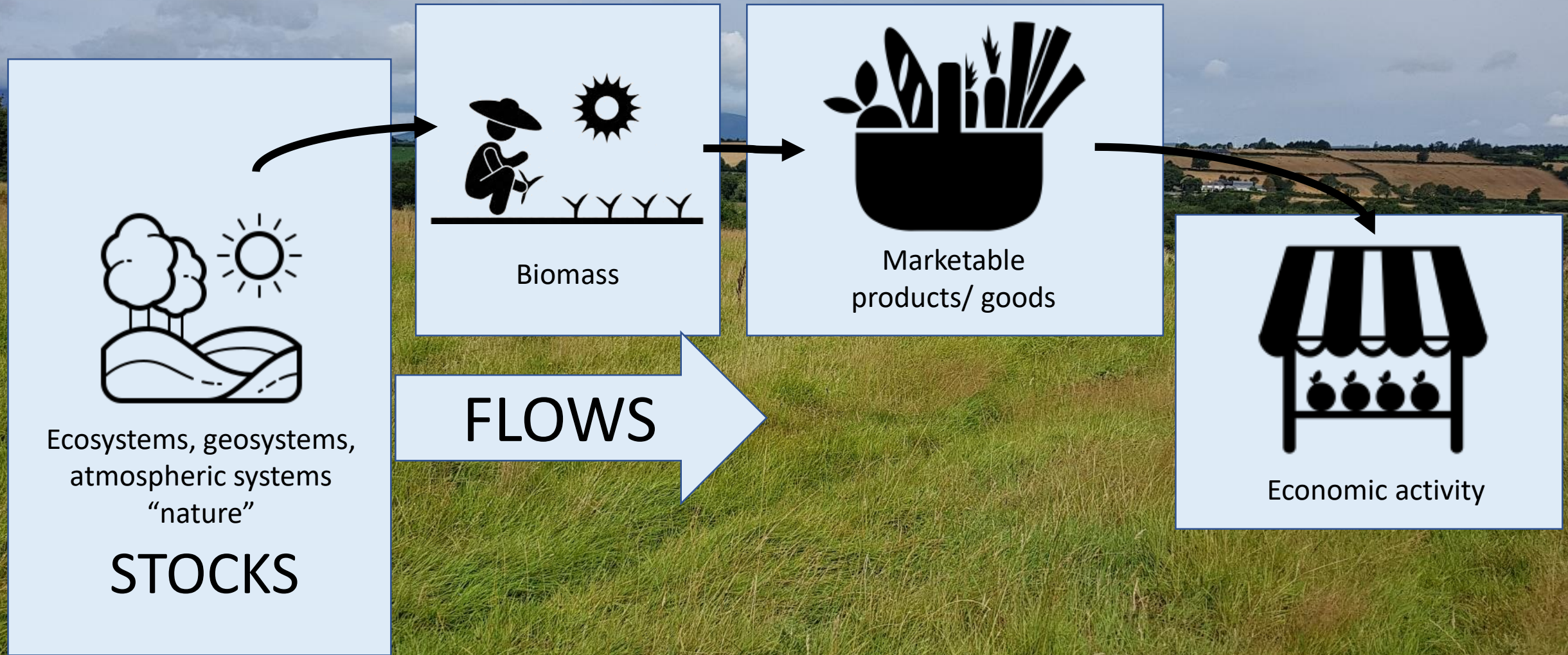
- Price doesn't reflect all costs of production
- eg surveys, measures of activity



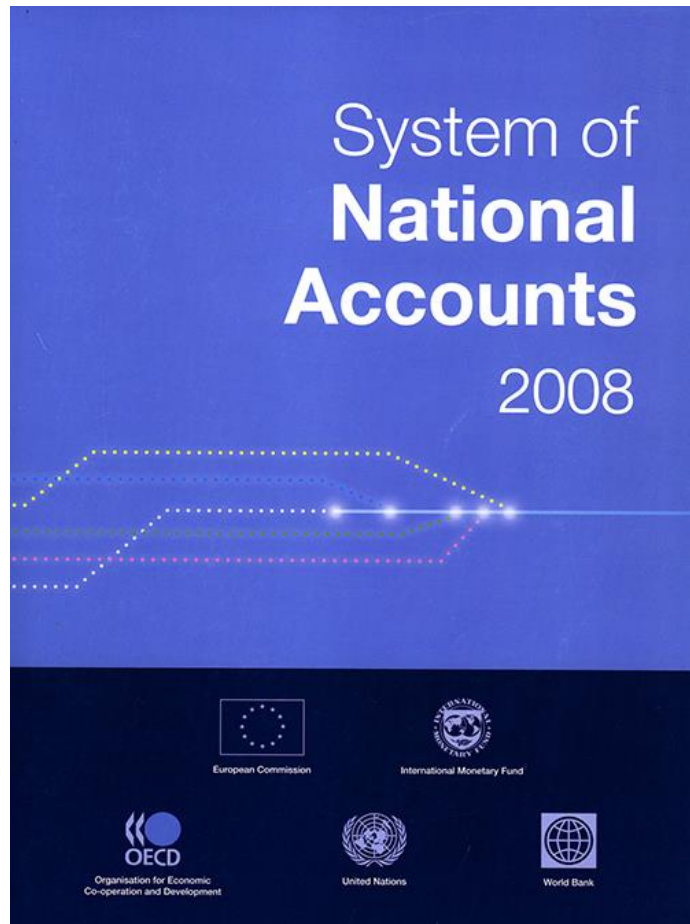
NATURAL CAPITAL

- ✘ Natural capital approach is not about putting a price on nature
- ✓ Natural capital approach is about valuing nature

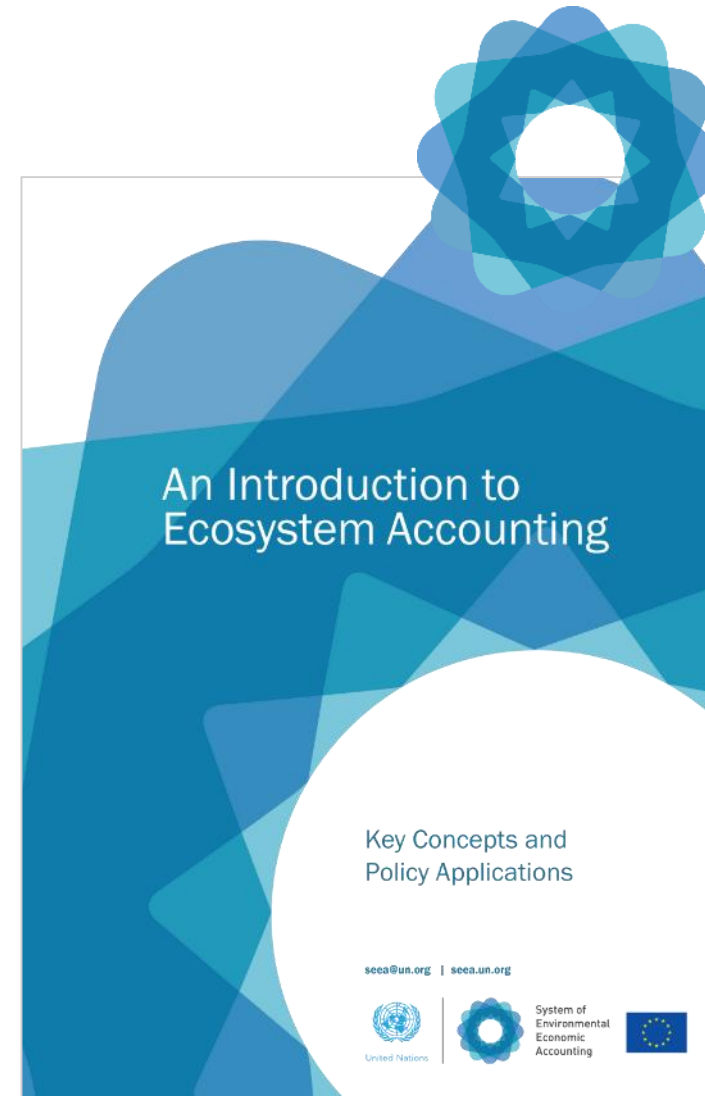
What is natural capital?



Natural capital accounting: a systematic way to measure and report



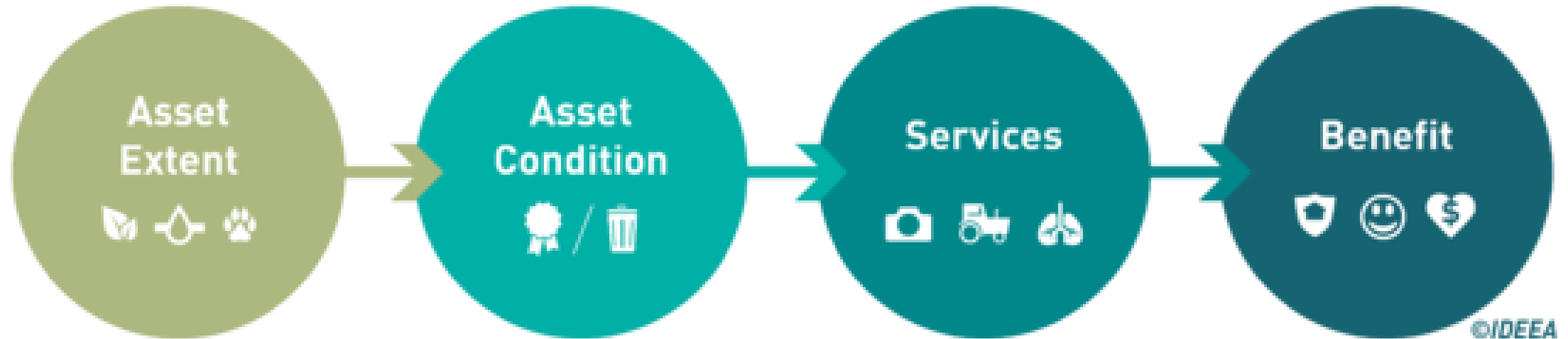
GDP
National
Expenditure
Outputs



System of
Environmental
Economic
Accounting

Underlying
stocks and their
condition

SEEA-Ecosystem Accounting

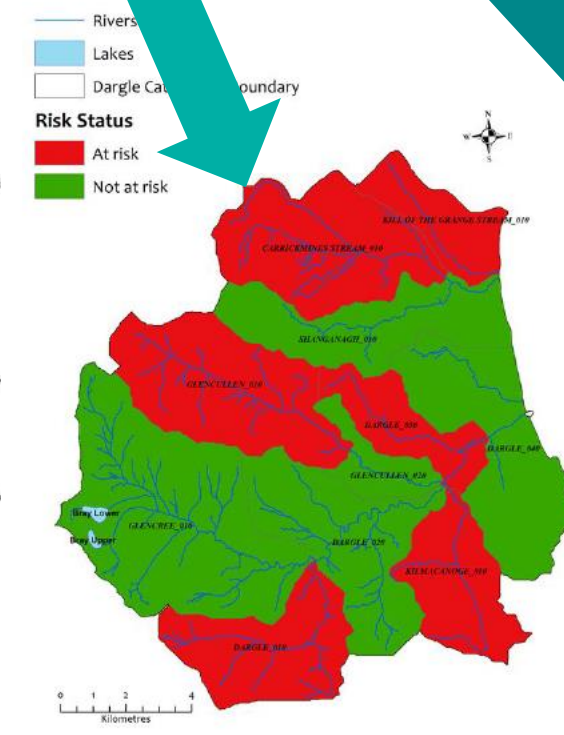
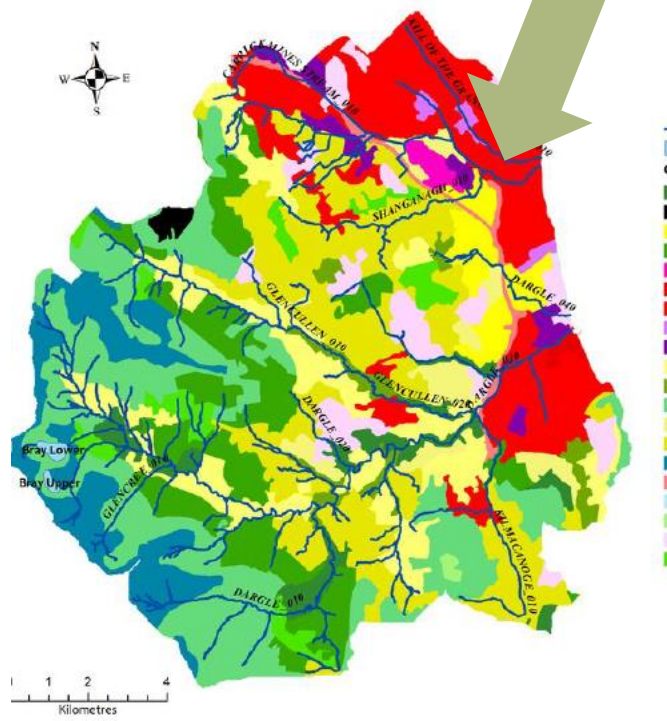


INCASE

Irish Natural Capital Accounting for Sustainable Environments

 epaResearch

www.incaseproject.com



SUPPLY ACCOUNT: WHAT ECOSYSTEM SUPPLIES WHAT SERVICE?

What assets?
What services?
What matters?
What can you do?

Selected economic activities	INCASE Supply Classification (CORINE / other data merged)									
	Woodlands and forests	Grasslands	Heathlands	Grassland	Crop land	Urban and built-up	Coastal	Water bodies	Water bodies	Other
Ag. - animal, forestry and fishing										
Manufacturing and construction										
Electricity, gas, heat and water supply										
Commerce and trade										
Transport and communication										
Public administration										
Professional services										
Health and social work										
Education										
Information and communication										
Other services										
Total										

Farrell et al. 2021 <https://oneecosystem.pensoft.net/article/65582/>



Carbon storage



Habitat for natural enemies/pollinators



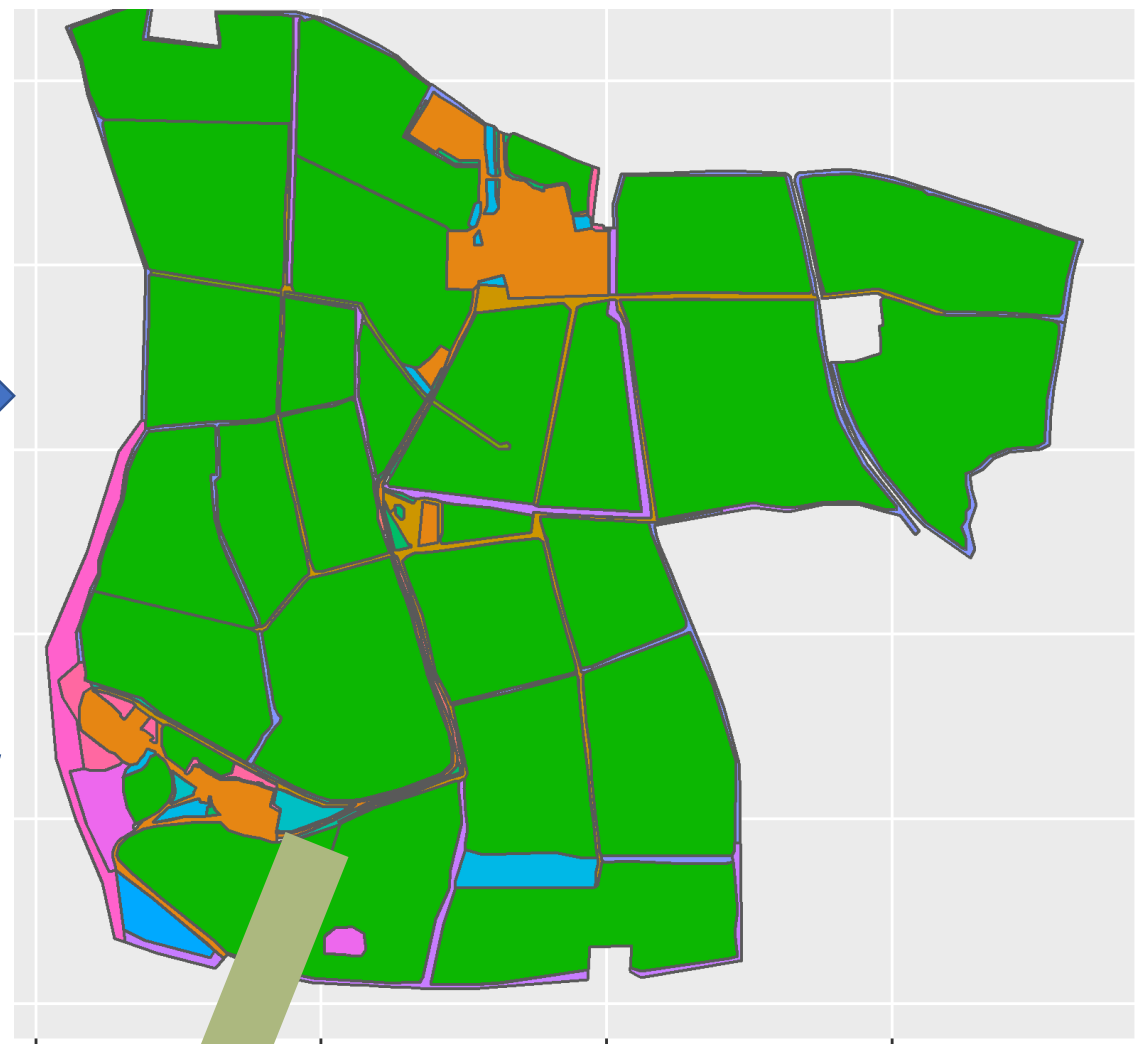
Fodder for livestock



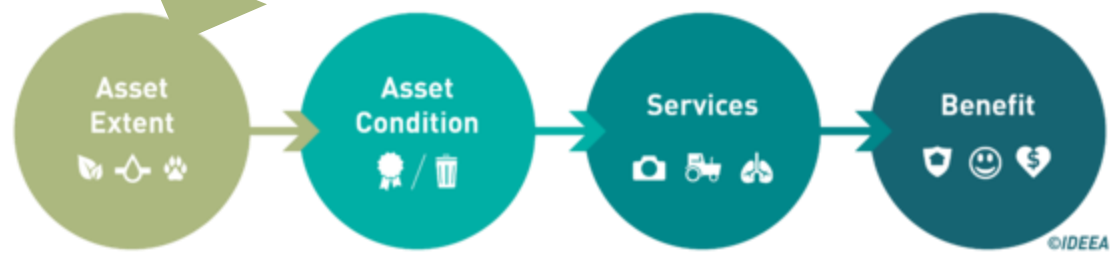
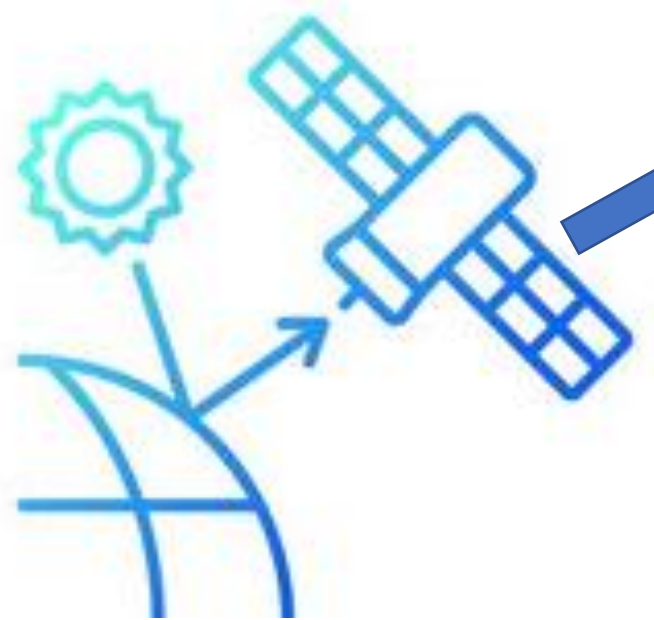
Biodiversity



www.biorbic.com/farm-zero-c



Name	
	BL2
	BL3
	ED2
	ER1
	FW4
	GA1
	GA2
	GS2
	WD1
	WD3
	WD5
	WL1
	WL2
	WN2
	WN5
	WS1

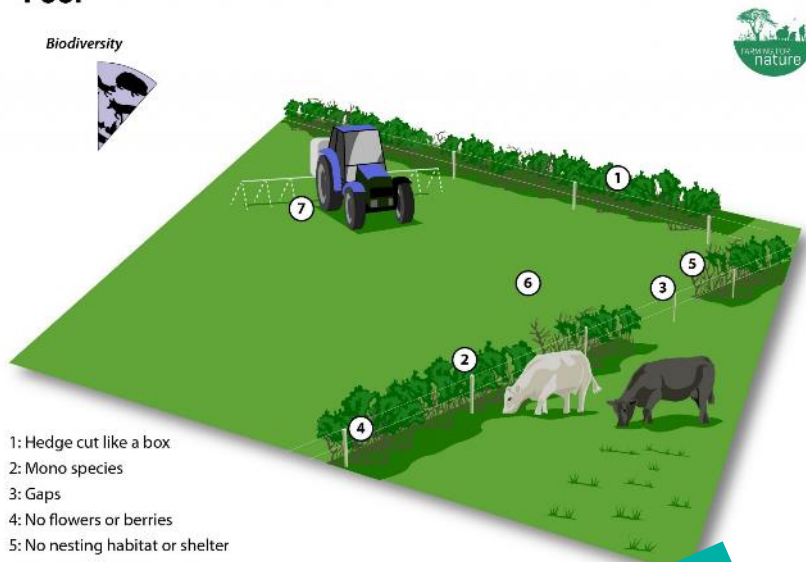


Poor condition



Poor

Biodiversity



- 1: Hedge cut like a box
- 2: Mono species
- 3: Gaps
- 4: No flowers or berries
- 5: No nesting habitat or shelter
- 6: No shelter or shade for livestock
- 7: Spraying beside hedge

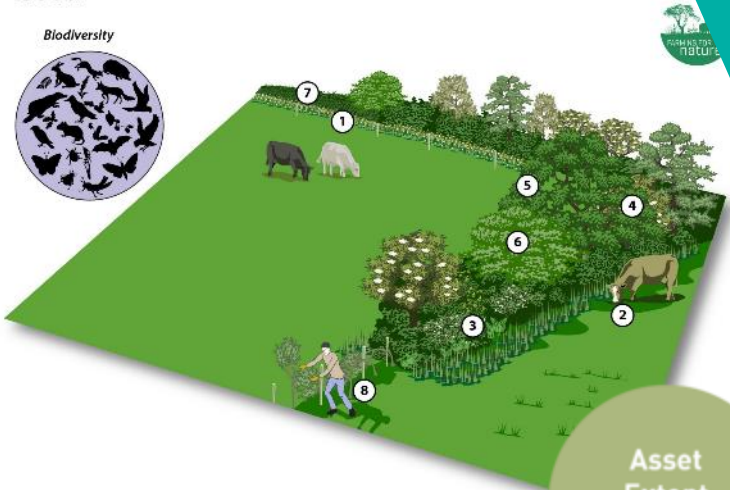


Good condition



Good

Biodiversity



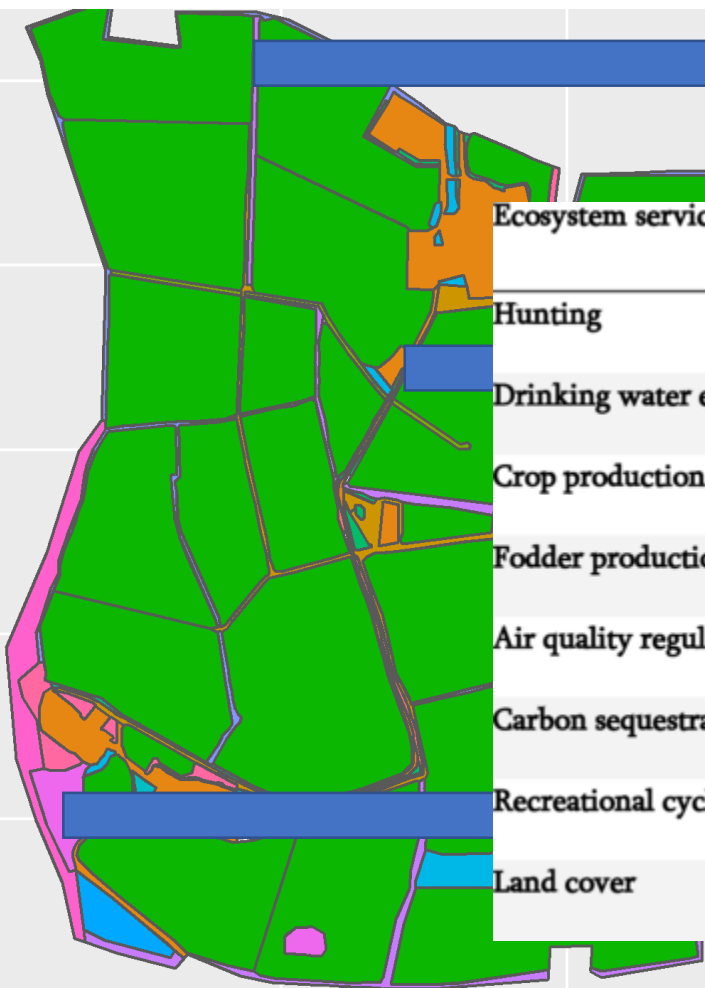
- 1: Temporary fencing during main flowering period and grazing later summer on rota
- 2: When hedgerow is fully mature, allow cattle to graze to keep back encroaching scrub
- 3: Flowers in Spring, berries in Autumn
- 4: Ample shade and shelter for livestock
- 5: Allow to grow up and out
- 6: Good diversity of tree species
- 7: Trimmed back in sections only over an extended period
- 8: Laying hedge



Photos by Cian White

www.farmingfornature.ie

©IDEA



BL2
BL3



Ecosystem service	Unit	Basic spatial unit number								
		1	2	3	4	5	6	7	8	9
Hunting	kg/yr	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Drinking water extraction	m3/yr	58	58	58	58	58	58	58	58	58
Crop production	kg/yr	0	0	0	0	0	0	0	0	0
Fodder production	kg/yr	935	935	0	935	935	0	681	0	0
Air quality regulation	kg/yr	0.6	2.3	2.3	0.6	2.3	2.3	0.6	2.3	2.3
Carbon sequestration	kg/yr	11	11	91	11	11	91	0	0	0
Recreational cycling	trips/yr	0	4	4	0	4	4	4	1	1
Land cover	-	Grass land	Grass land	Forest	Grass land	Grass land	Forest	Crop land	Crop land	Crop land



TOOLS for FORESTERS



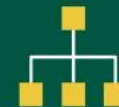
WE MAP

Forests provide timber but also support biodiversity and other public benefits. We map specific forest sites using a Natural Capital Accounting approach to quantify forestry stocks and the various flows of benefits.



WE MEASURE

By assessing the quantity, quality and location of forest stocks, we can determine the flows of commercial timber production and other benefits such as carbon sequestration, water retention, biodiversity and recreation.



WE MODEL

Looking at different land management scenarios, we can co-develop tools for foresters to enable robust and transparent management decision-making to enhance sustainability.



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



FOR**ES**

COILLTE
nature

www.for-es.ie

Valuing Natural Capital for the Future

- Need to value farmland more broadly for **multiple benefits**
- Natural capital approach is about **stocks & flows** of benefits
- NCA => **quantifying & tracking** change in assets, condition, services & benefits
- Accounts can be generated at a range of scales to inform **management**

