

## Challenges and Opportunities to Incorporating Natural Capital and Ecosystem Services into National Economic Accounting Systems

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### Challenge

Clarify use cases to structure how to think about valuation.

### Opportunities

Identifying the economic questions where natural resource and environmental data matter, opens doors to better economic management (budget forecasts, debt sustainability, etc).

### Challenge

Data organization has concentrated costs and diffuse benefits – statistical system are a public good.

### Opportunity

International cooperation can pool resources because there can be small incremental cost of organizing data relative to the initial costs of developing systems.



**Multiple objectives need multiple (but a small number) of accounting boundaries.**

**Arguing for a single boundary is unproductive.**

**Produce accounts with 3 boundaries.**

- The asset price depends on the accounting boundary.
- For a national budget forecast & debt sustainability D + M services matter.
- All matter for SDG performance and social progress.

Natural asset



Household produced service (H)



Omitted from economic accounts or in satellite accounts.

Avoided defensive expenditure, risk management, or cost savings (D)



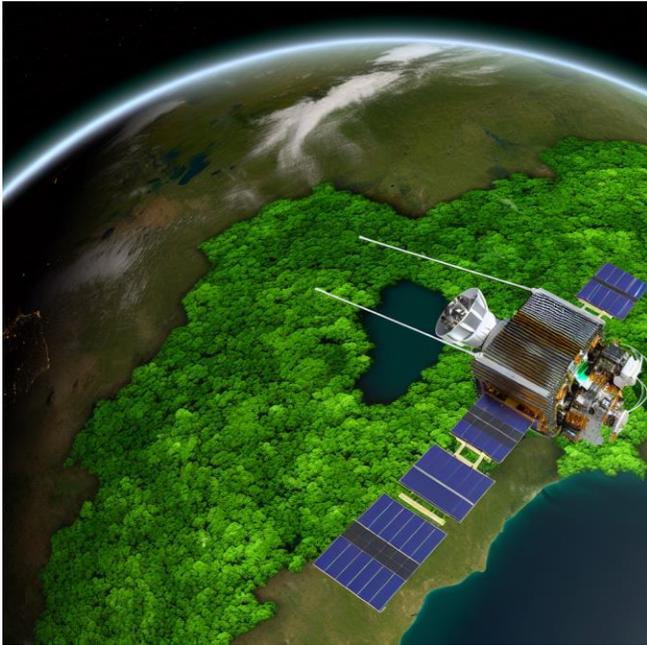
Often misattributed in national accounts and other economic data.

Market (SNA) services (M)

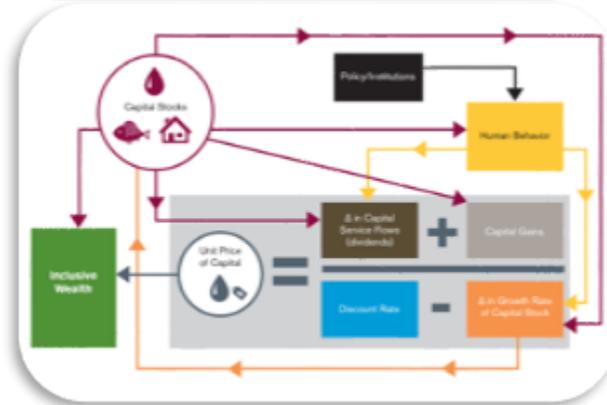


On the SNA (2025) natural capital balance sheet.

Organizing data can have large fixed cost and low variable costs and benefits from cooperating.



- Remote sensing,
- In-situ sensors,
- Mobile phone-based collection,
- Citizen science,
- Administrative,
- Market data,
- Surveys.



People, computers (AI), existing approaches are need to organize the data.

	Industry A in Country 1	Industry A in Country 2	Industry B in Country 1	Industry B in Country 1	...	Forest type A in Country 1	Forest type A in Country 2	Forest type B in Country 1	Forest type B in Country 2
Industry A in Country 1									
Industry A in Country 2									
Industry B in Country 1									
Industry B in Country 1									
...									
Industry A	Forest type A in Country 1								
Industry A	Forest type A in Country 2								
Industry B	Forest type B in Country 1								
Industry B	Forest type B in Country 2								
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Indust	Forest type A in Country 1								
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Indust	Forest type B in Country 1								
Indust	Forest type B in Country 2								
...									
Forest type A in Country 1									
Forest type A in Country 2									
Forest type B in Country 1									
Forest type B in Country 2									

Organized data that many business, government ministries, etc can use to make economic and other decisions.