Integrated data in support of climate change policies

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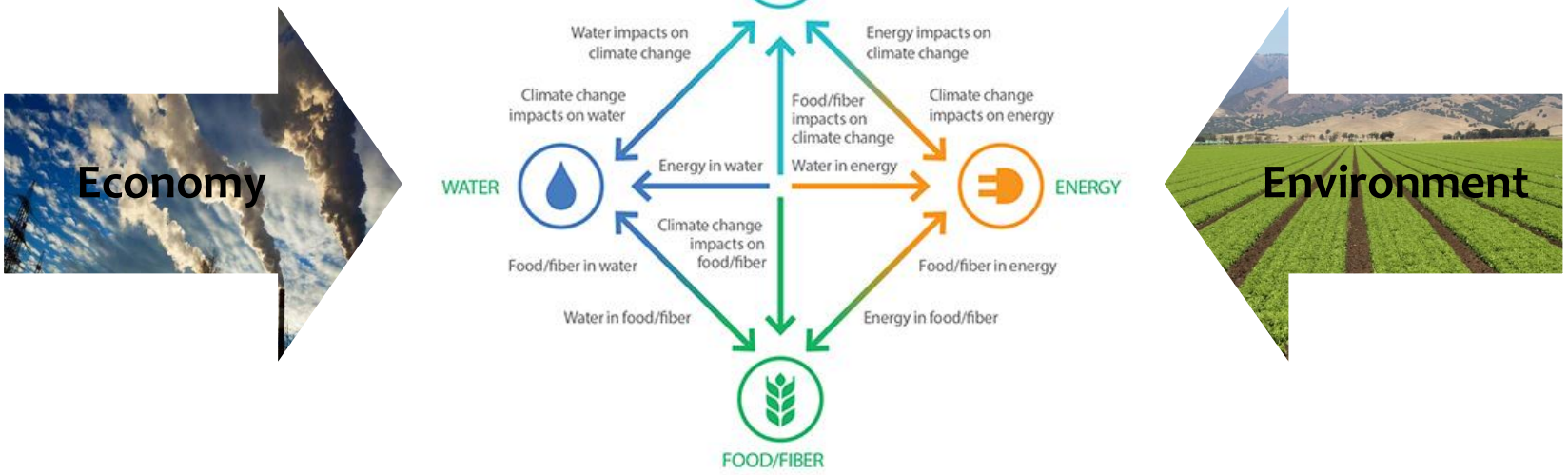
Integration for Sustainable Development

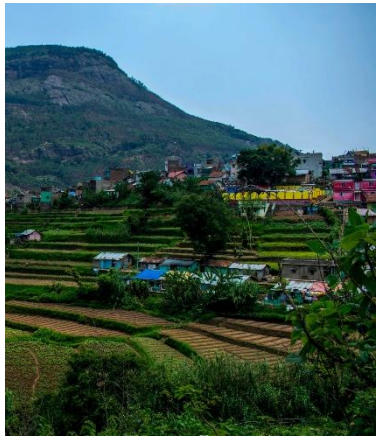


* Environmental policy must consider **interconnected natural systems**
  * E.g. Food, energy, water and climate change **nexus**
* Policies should recognize the links;
  * Between different natural systems → Integrated environmental information
  * Between the economy and environment → Integrated environmental-economic information

The Need

- Our overall well-being depends on nature and understanding the relationship between climate change and the economy.
- But headline indicators like GDP, the unemployment rate and inflation do not capture these interlinkages.
- As a result, decisionmakers don't have access to key information necessary to effectively pursue and track sustainable development.
- They don't have key information on the tradeoffs between climate change mitigation and adaptation policies and economic policies.






The response from the global official statistics community: SEEA

- Joins the System of National Accounts as an international statistical standard
- Framework for organizing and presenting statistics on environment and relationship with the economy
- SEEA Central Framework was adopted by the UN Statistical Commission in 2012
- SEEA Ecosystem Accounting was adopted by the UN Statistical Commission in 2021

SEEA accounts most relevant to climate change

Most relevant accounts

- Energy physical supply and use
  - How much energy does my country's economy need? How much of it is from renewable sources?
  - What is the energy efficiency of the economy overall? And efficiency of different industries such as manufacturing, electricity supply etc?
- Air emissions
  - How much GHG is my country's economy generating? What portion of those GHGs are due to exports to other countries?
  - What are the emissions from different industries (e.g. agriculture, manufacturing, ect.) in my country?
  - What is the emission intensity of production activities?

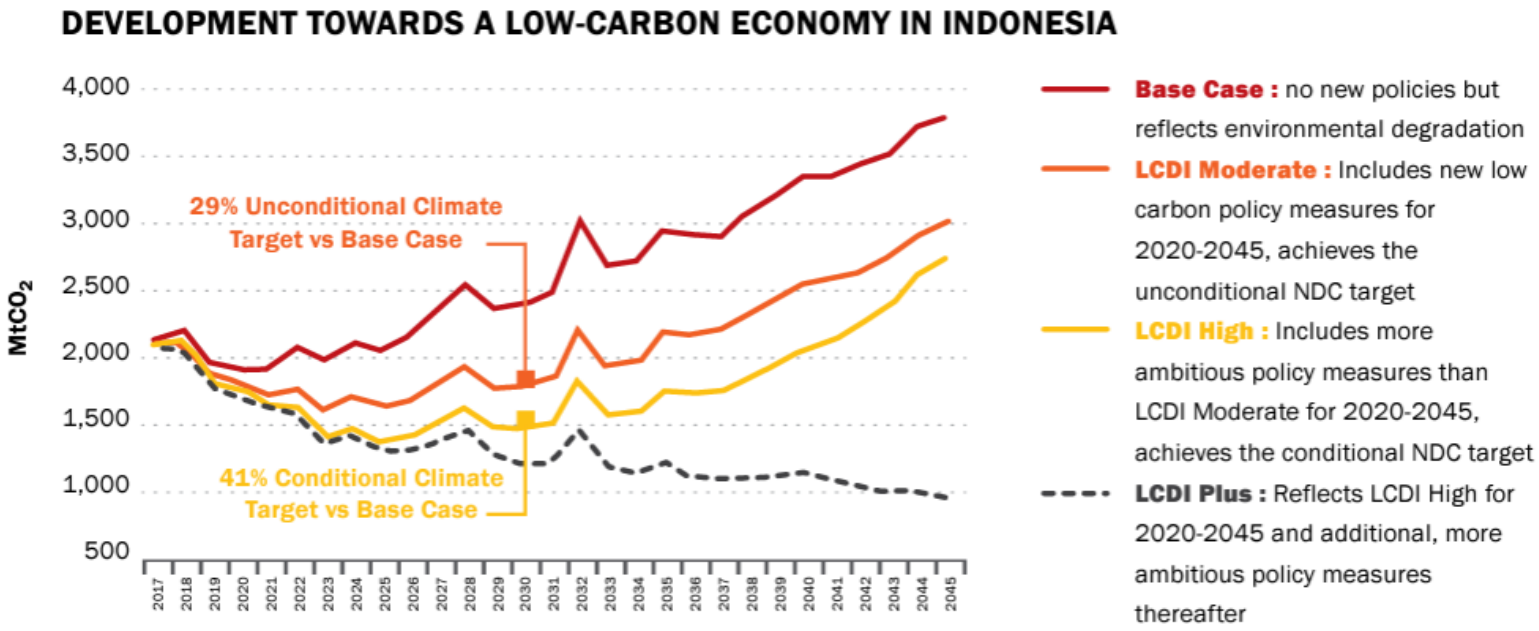
Applications – CO2 emissions in Indonesia

Tabel 3.1. **Emisi CO_2 dari Penggunaan Energi menurut Lapangan Usaha dan Rumah Tangga (ribu ton), 2017-2021**
Table ***CO_2 Emission from Energy Use by Industry and Household (thousand tonnes), 2017-2021***

Sektor Ekonomi *Economic Sector*	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Seluruh Lapangan Usaha ***All Industries***	**456 932**	**548 368**	**593 715**	**535 453**	**536 830**
- Pertanian, Kehutanan, dan Perikanan - *Agriculture, Forestry, and Fishing*	1 121	1 229	1 272	1 295	1 284
- Pertambangan dan Penggalian - *Mining and Quarrying*	4 891	7 544	11 878	6 639	9 485
- Industri Pengolahan - *Manufacturing*	70 222	121 407	152 545	139 092	110 608
- Pengadaan Listrik dan Gas - *Electricity and Gas Supply*	261 179	306 342	321 095	299 417	325 035
- Transportasi - *Transportation*	93 382	81 555	67 892	56 776	57 068
- Lapangan Usaha Lainnya - *Other Industries*	26 137	30 291	39 033	32 234	33 351
Rumah Tangga ***Households***	**72 608**	**77 045**	**82 546**	**79 346**	**82 025**

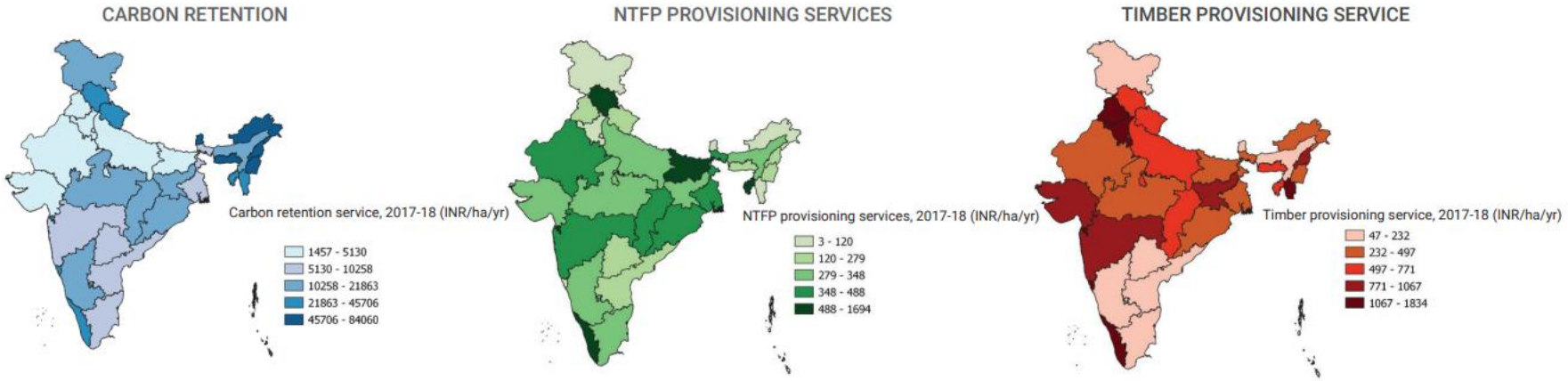
Note: BPS Statistics Inonesia

Applications – scenario modeling



Accounting for and mapping forest ecosystem services in India

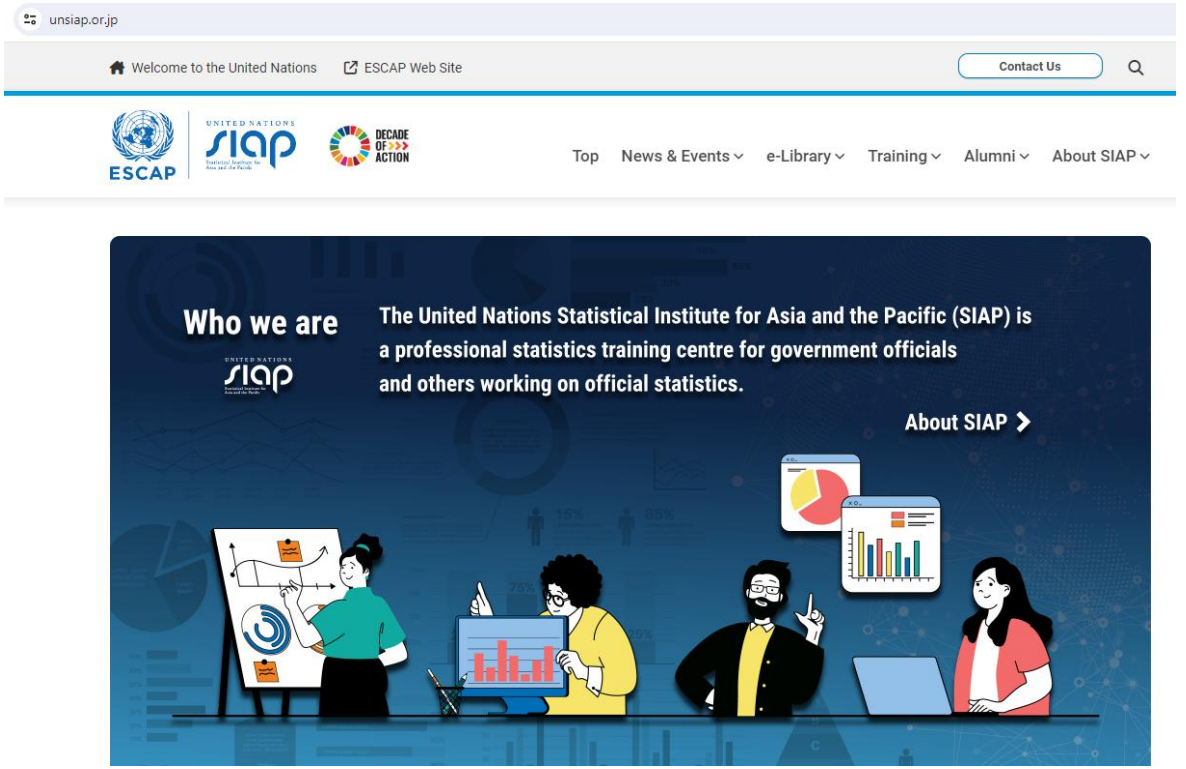
Figure 4: *Spatial distribution of ecosystem service values for India's forests. India's ecosystem accounting for forests has assessed timber and NTFP provisioning services and carbon retention. For each of these ecosystem services, economic valuations have been applied to provide per hectare per year monetary values. Figure 4 shows how these forest ecosystem services are distributed across the whole country.*



Source: MoSPI

Resources

* New UN SIAP website (https://www.unsiap.or.jp/)
* Courses on SEEA
* Self paced
* Free
* Open to all
* Some available in multiple languages



A final quote….

OUR COMMON AGENDA

Report of the Secretary-General

> *A **historic step** towards transforming the way how we view and value nature.*
>
> **António Guterres**
> UN Secretary General

- *Absurdly, GDP rises when there is overfishing, cutting of forests or burning of fossil fuels. We are destroying nature, but we count it as an increase in wealth.*
- *I urge Member States and others to already begin implementation of the recent System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting*

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THANK YOU!


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