



# Soil and Land Accounts

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# Soil accounts

- Soil is considered an ecosystem, a natural capital containing vital economic value.
- Stocks of soil can be measured inclusively as a complex material described by soil topology as well as for each main component : minerals, biomass, carbon, fauna, flora.....
- Some functions and ecosystem services of Soil :
  - Production function (crops)
  - Resource function (material for industry)
  - habitat function
  - Climate regulator



## Soil accounts (cont'd)

- An information system on the current status and problems of land resources provides :
  - a macro-view of the current status of soil degradation in relation to the total economic situation of the country.
  - Detailed disaggregated information on soil degradation
  - More awareness of the dangers of inappropriate management of the soil.



## Soil accounts (cont'd)

- A land and soil resource accounting process was carried out in the Philippines in 2000 with the SEEA framework
- Land accounts were produced to outline various land uses in the country including agriculture, residential, commercial, industrial types of uses etc...
- The indicators derived from land accounts serve in the proper allocation and use of land resources.



# Land and ecosystem accounts

- The integration of Land and ecosystem accounting :
  - Provides a complete picture of land cover and land use for a country
  - Promotes the standardization and classifications of Land cover, land use..
  - Allows changes in land use, land cover, habitats and biodiversity to be linked to driving forces
  - Facilitates its application at national, regional, watershed or landscape type levels

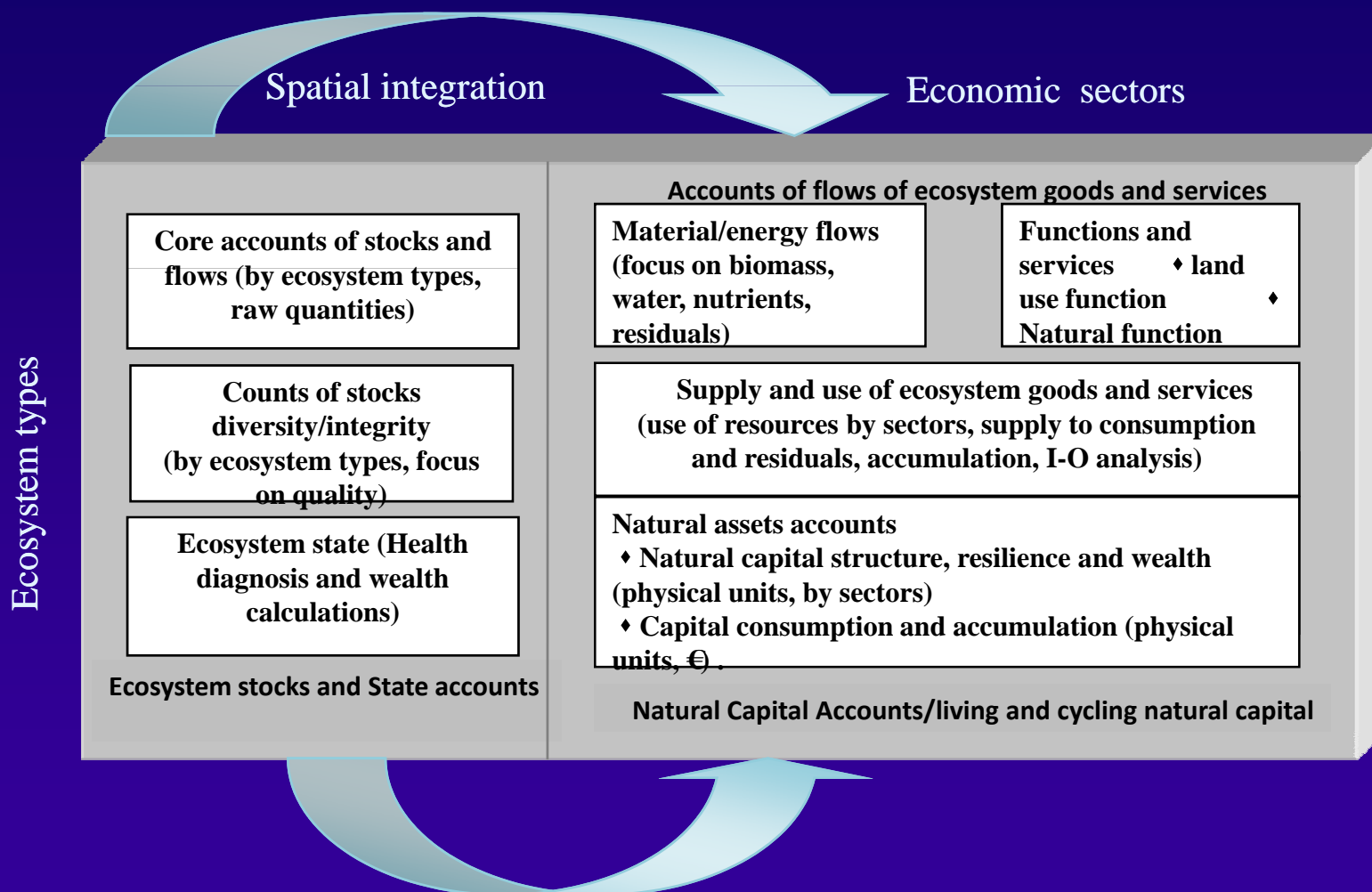


# Land and ecosystem accounts (cont'd)

- The land and ecosystem accounting framework (previous figure) shows that land cover accounts are supplemented with accounts on land use and ecosystems, and economic information
- Ecosystem accounts:
  - Expand the land accounts in order to record the supply of ecosystem goods and services
  - Include geographical information and monitoring data on atmosphere and climate, the water systems, fauna and flora...



## Land and ecosystem accounting framework





- The following figures present the type and extent of land degradation in ESCWA region:

#### Types and causes of Land degradation in selected ESCWA member countries

	Water	Wind	Chemical degradation	Physical degradation	Deforestation	Overgrazing	Agricultural activity
Egypt	..	29	68	2	2	30	68
Iraq	6	37	45	11	2	36	61
Jordan	10	90	..	..	6	94	..
Kuwait	..	88	12	..	..	88	12
Lebanon	99	..	1	..	63	36	1
Syrian Arab Republic	17	46	37	..	9	46	45

#### Extent of land degradation in selected ESWCA ESCWA members

	Total area	Not degraded		Lightly degraded		Moderately degraded		Severely degraded		Very severely degraded		Cause	Type
Bahrain	0.7	..	..	..	..	..	..	..	..	..	..	..	..
Egypt	1 001	614	62	272	27	26	3	66	7	19	2	1	iii
Iraq	438	3	1	0	0	91	21	196	45	149	34	1, 2	i, ii, iii, iv
Jordan	96	3	4	0	0	62	65	14	14	16	17	2, 3	i, ii
Kuwait	24	0	0	0	0	24	98	0	0	1	2	2	ii
Lebanon	104	0	0	72	69	6	6	26	25	0	0	2, 3	i
Oman	271	42	16	76	28	46	17	107	39	0	0	2, 3	i, ii
Palestine	6	..	..	..	..	..	..	..	..	..	..	..	..
Qatar	11	0	0	7	65	4	35	0	0	0	0	2	ii
Saudi Arabia	2 396	514	21	732	31	348	15	660	28	142	6	2	ii

Causes: 1 = agriculture; 2 = overgrazing; 3 = deforestation.

Types: i = water erosion; ii = wind erosion; iii = chemical deterioration; iv = physical deterioration.