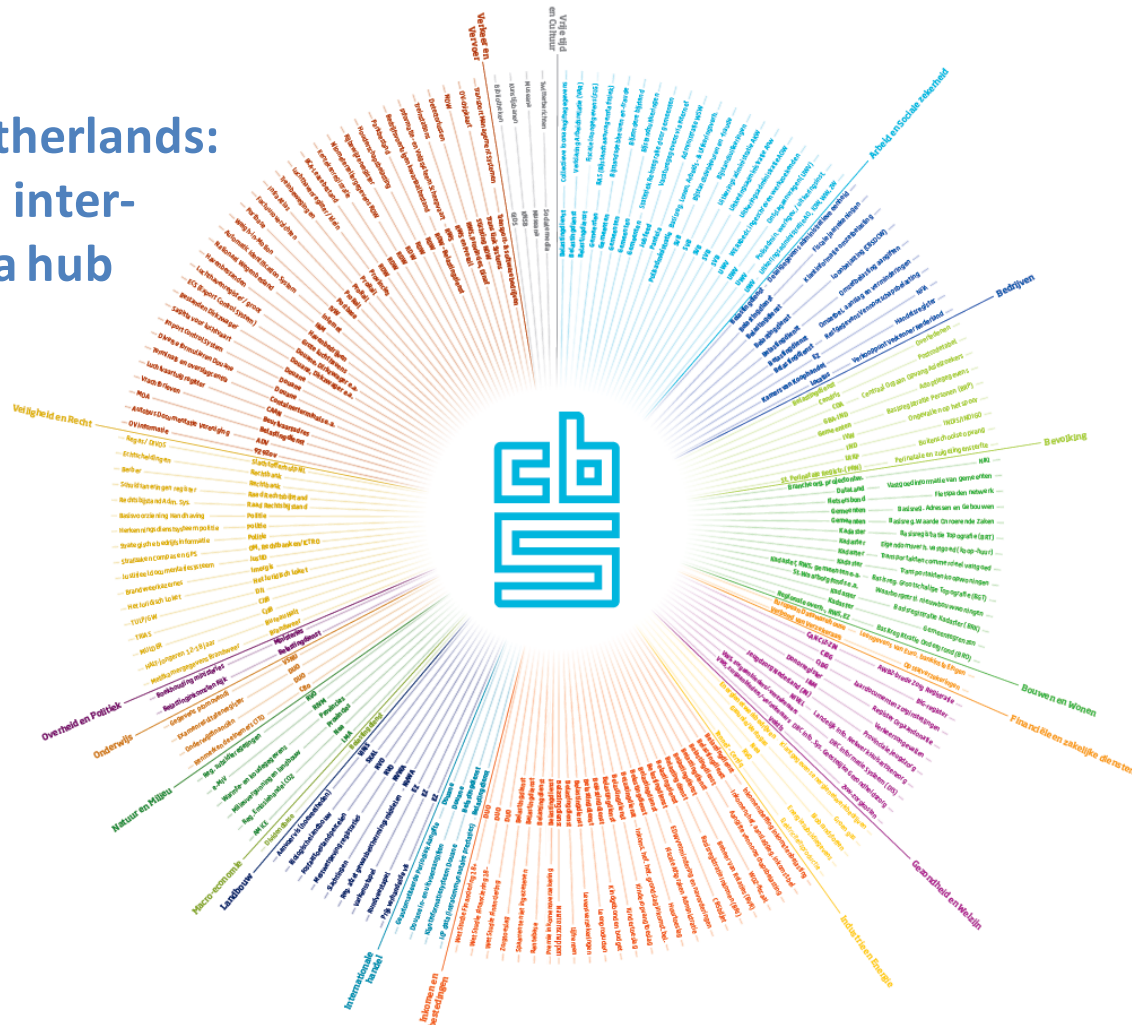# Geospatial data for the SDGs

Expert Forum for producers and users of climate change-related statistics

Hermanus Rietveld (Coordinator Sustainable Development Goals)

4 October 2018

Statistics Netherlands: national and inter- national data hub

Statistics Netherlands and the SDGs

- Leading international player in the field of SDG monitoring

- Innovative approach: not only knowledge of using primary data (surveys) and registers (admin data), but also sensor/big data, including city data and geospatial data

- First NSI worldwide to produce a baseline report on the national position regarding the SDG indicators

- Frontrunner in using data from civil society organisations in national SDG monitoring

- Aims to help and support other countries with this very relevant experience

Our second SDG report

The Sustainable Development Goals: the situation for the Netherlands

- Report published on 7 March 2018
- feedback on first report included
- Based on international (IAEG) indicators
- Contains CBS and external data
- Financed by Ministry of Foreign Affairs
- English version available at:

https://www.cbs.nl/en-gb/publication/2018/10/the-sdgs-the-situation-for-the-netherlands

Working Group on Geospatial Data

– Resolutie GA: "improve the availability, quality, timeliness and disaggregation of data to support the 2030-agenda"

– Geospatial information explicitly quoted as data source

– WG on geospatial data established in spring 2016, CBS joined WG one year ago

– First product:

Shortlist

results of the analysis of the Global Indicator Framework with a "geographic location" lens

Table A:
List of Indicators where geospatial information has a direct contribution

Table B:
List of additional Indicators where geospatial information has a significant/supporting contribution.

Working Group on Geospatial Data

A few relevant examples for Statistics Netherlands:

- 6.4.1 Change in water use efficiency over time
- 6.4.2 Level of water stress: freshwater withdrawal as a proportion of aviable resources
- 15.1.1 Forest area as a proportion of total land area
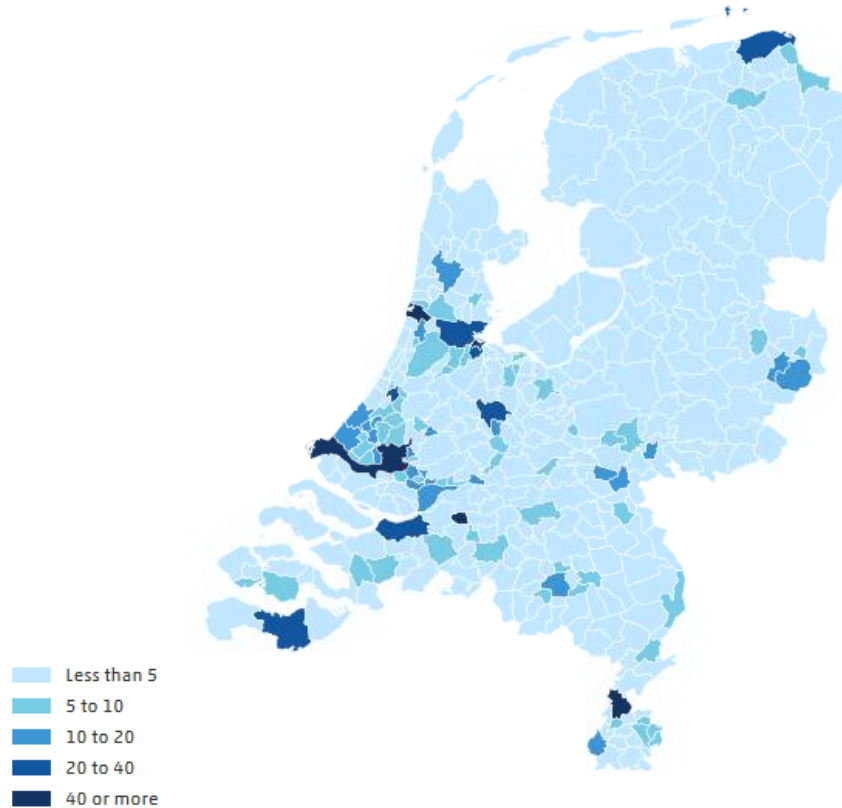- 15.3.1 Proportion of land that is degraded over total land area

Country example: greenhouse gas emissions

– CO_2 emission in 2017 for The Netherlands at the same level as in 1990 (163 billion kg)

– In the same period: emissions of other greenhouse gasses reduced by half

– Total emissions expressed in CO_2 equivalents were 13 percent lower than in 1990

– Two examples: use of geospatial information for estimating uptake and emission of carbon dioxide in The Netherlands
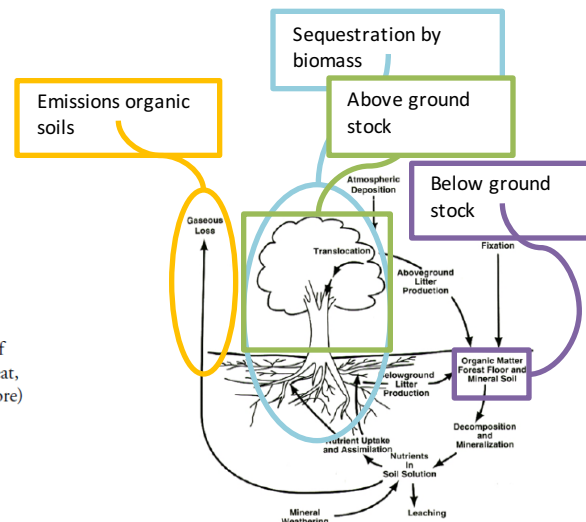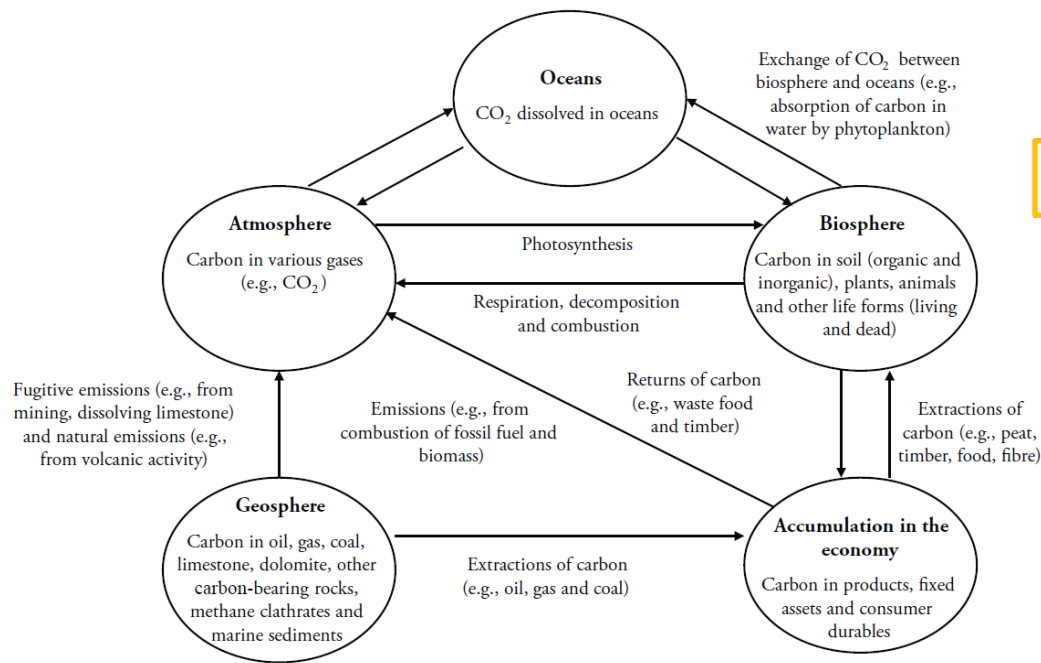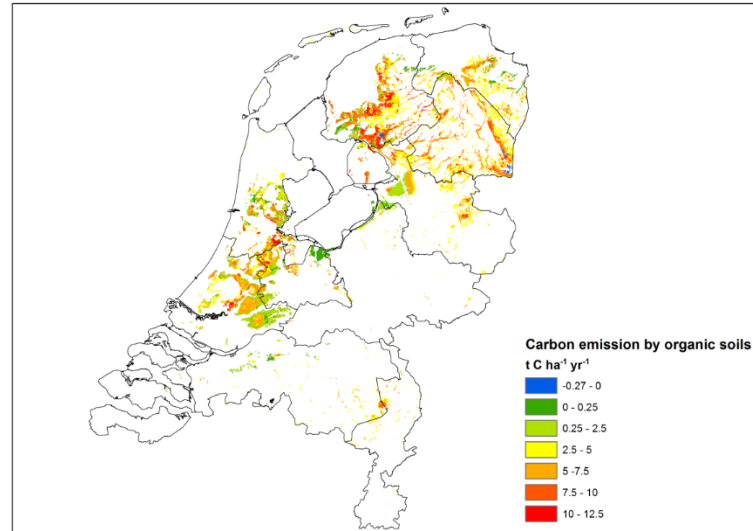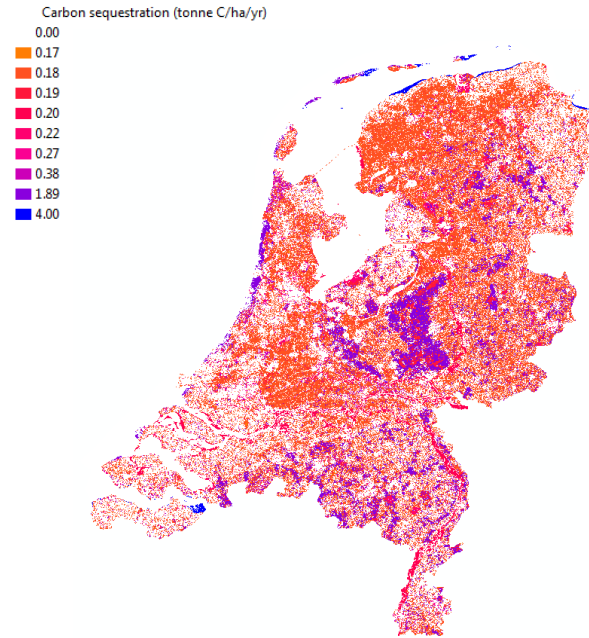
Example 1: regional map CO$_2$ emissions

Carbon dioxide emissions in 2016 (kg per square metre)

Less than 5
5 to 10
10 to 20
20 to 40
40 or more

Example 2: Dutch carbon accounts

Output carbon accounts

Carbon sequestration (tonne C/ha/yr)
- 0.00
- 0.17
- 0.18
- 0.19
- 0.20
- 0.22
- 0.27
- 0.38
- 1.89
- 4.00

Carbon emission by organic soils
t C ha⁻¹ yr⁻¹
- -0.27 - 0
- 0 - 0.25
- 0.25 - 2.5
- 2.5 - 5
- 5 - 7.5
- 7.5 - 10
- 10 - 12.5

Most important conclusions

- Carbon emmision by biomass in the Netherlands is nearly twice as high as sequestration

- Forests account for 60 percent of the uptake, carbon emmisions are almost entirely caused by outgassing of peatlands

- The lowering of the water level for agricultural purposes causes the peatlands to desiccate, thus releasing carbon

- Carbon emmisions are dependent of the drainage depth, with the largest numbers in the northern provinces.

Questions?