Agricultural areas in the Netherlands

A selection from the SEEA-EEA accounts

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Ecosystem accounts

- Extent account ✔
- Carbon account ✔
- ESS supply/use – physical ✔
- ESS supply/use – monetary ✔
- Condition account
- Biodiversity account
Top ten exporting countries agricultural products, 2014

Source: WTO

Top 10 destinations in Dutch agricultural exports

Current ET classification

- Agriculture
  - Non-perennial plants
  - Perennial plants
  - Greenhouses
  - Meadows (grazing)
  - Bushes and hedges bordering fields
  - Farmyards and barns
- Dunes and Beaches
- Forests and other (semi-) natural environments
- Built-up areas
- Water
Extent account
## Extent account

<table>
<thead>
<tr>
<th>Ecosystem Unit</th>
<th>Area (km²)</th>
<th>2006</th>
<th>2013</th>
<th>Δ</th>
<th>Area (percentage)</th>
<th>2006</th>
<th>2013</th>
<th>Δ</th>
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<tbody>
<tr>
<td>Agriculture</td>
<td>19174</td>
<td>18811</td>
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<td>46,16</td>
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<td>Sand</td>
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<td>Wetlands</td>
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<td>Other nature</td>
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<td>Built-up and paved</td>
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<td>5410</td>
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<td>12,60</td>
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<td>Inland water</td>
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<td>The Netherlands</td>
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Extent account
Agricultural ESS:
- food
Agricultural ESS:
- feed
Regulating ESS:
- Pollination
Carbon account

Figure 1.2.1 Main components of the carbon cycle, and the carbon flows between these components. Source: SEEA EEA.
## Carbon account

### Table 6.1.1: Carbon account for the Netherlands (2013) in Mt. C. Grey cells are null by definition.

<table>
<thead>
<tr>
<th></th>
<th>Geocarbon</th>
<th>Biocarbon</th>
<th>Carbon in the economy</th>
<th>Carbon in the atmosphere</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>oil</td>
<td>gas and shalesgas</td>
<td>coal</td>
<td>limestone and man made</td>
<td>total_geocarbon</td>
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<td>Opening stock</td>
<td>54</td>
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<td>12717</td>
<td>13398</td>
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<td>Additions to stock</td>
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<td>0.2</td>
<td>0.2</td>
<td>1.0</td>
<td>0.6</td>
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<tr>
<td>Managed expansion</td>
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<td>0.2</td>
<td>0.2</td>
<td>1.0</td>
<td>0.6</td>
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<td>Imports</td>
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<td>190</td>
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<td>Reductions in stock</td>
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<td>41</td>
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<td>Natural contraction</td>
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<td>Managed contraction</td>
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<td>Reclassifications</td>
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<td>Exports</td>
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<td>5</td>
<td>17</td>
<td>6</td>
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<td>Net carbon balance</td>
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<td>Closing stock</td>
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<td>587</td>
<td>12717</td>
<td>13356</td>
<td>48</td>
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</table>
Carbon account

Figure 2.1.1 Processes in the biocarbon cycle.
Carbon account

Koolstofvastlegging
ton C per ha per jaar
- 0
- 0.0 - 0.25
- 0.25 - 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- > 1.5

C sequestration per ecosystem type

- Salt marshes: 4.6%
- Forests: 60%
- Coastal dunes: 3.1%
- Misc. unpaved: 5.4%
- Agriculture: 21%
Carbon account

Koolstofemissie uit veen

C emissions per ecosystem type

- Agriculture: 70%
- Urban: 9.3%
- Forests: 4.0%
- Parks: 1.5%
- Misc. unpaved: 7.8%
- Heath / driftsand: 1.3%
- (semi-)natural grassland: 3.3%
- Wetlands: 2.1%

Ton C / ha

< 0
0 - 3
3 - 6
6 - 9
9 - 11.7

Relative extent
Condition account: acidification
Conclusions

– Implicit links between ESS, ET and abiotics.
  - Co-evolution of geo-ecosystems
– Visualizations help in dissemination *and* analysis.
– ET classification currently a bit ad-hoc; no proper hierarchy