**Evaluation of landscape amenity benefits in multifunctional agricultural accounts**

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**Introduction**

Landscape provision by agriculture: service function to society & nature part of agriculture’s multifunctionality

**Problem**

- no reward for amenities: non-commodity goods
- benefits for society not in the conventional economic accounts (EAA)

**Objective**

Evaluating the sector’s multiple functions & monitor the related policies.

Requires indicators that comprise:

- the sector’s economic value
- environmental concerns
- non-market functions

**Solution:**

**Integrated Economic and Environmental Accounts for Agriculture (EEAA)** [2, 3]

The EEAA extend the conventional EAA with environmental issues, valued in monetary terms. The sector’s private costs and benefits are integrated with external 'social' ones, i.e. commodity goods and services with non-commodity ones. As both positive and negative externalities are accounted for, the EEAA enable impact analysis of policy instruments, not only on agricultural income, but also on societal welfare.

Within the EEAA, the EPEA highlights the environmental subsidies and taxes, i.e. the transfers between society and agriculture. Their effect in the total of the EEAA, however, is neutral.

**The case of landscape amenities**

The agricultural landscape has various values:

- Social value
  - use value ➔ revealed preference
  - data from other markets to estimate proxies for the non-commodity good (by benefits transfer)
  - assume that landscape has value for residents, tourists
  - non-use-value
- Intrinsic value

**Conclusion**

The total benefits of the agricultural sector may be increased by over 12% of the sector’s private benefits, when external social benefits from landscape amenities are accounted for.

The principal interest of the EEAA lays not as much in the absolute value of each section, but rather in their relative weight and the overall evolution of their share in total cost/benefit over time.

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**Elements of the EEAA for landscape amenity provision for Belgium in 2001**

<table>
<thead>
<tr>
<th>Private cost and benefits</th>
<th>Million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross value added at basic prices</td>
<td>2814.19</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td>-606.18</td>
</tr>
<tr>
<td>Conventional EAA (include costs related to landscape provision)</td>
<td></td>
</tr>
<tr>
<td>Net value added at basic prices</td>
<td>2208.02</td>
</tr>
<tr>
<td>Other (subsidies – taxes) on production</td>
<td>110.49</td>
</tr>
<tr>
<td>Net value added at factor cost</td>
<td>168</td>
</tr>
<tr>
<td>External social benefits</td>
<td></td>
</tr>
<tr>
<td>Subsidies for landscape provision</td>
<td>-16.8</td>
</tr>
<tr>
<td>Residential value</td>
<td>210.41</td>
</tr>
<tr>
<td>Tourist value</td>
<td>41.90</td>
</tr>
<tr>
<td>Recreational value</td>
<td>?</td>
</tr>
<tr>
<td>Environmentally adjusted value added</td>
<td>2569.14</td>
</tr>
</tbody>
</table>

**References**


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