Between 1990 and 2000 built-up areas increased by 12% in the EU - the population only by 2%. Land consumption takes place almost exclusively at the expense of high-quality agricultural soil.

Thematic Strategy for Soil Protection
Communication COM (2006) 231
A ten-year work program for the European Commission which explains why further action is needed to ensure a high level of soil protection. It sets the overall objective of the Strategy and explains what kind of measures must be taken.

Proposal for a Framework Directive
It sets out common principles, objectives and actions for protecting soils across the EU and requires Member States to adopt a systematic approach to identifying and combating soil degradation, tackling precautionary measures and integrating soil protection into other policies.

Impact Assessment (SEC 2006) 1165
and 620
Contains an analysis of the economic, social and environmental impacts of the different options that where considered in the preparatory phase of the strategy and of the measures finally retained by the Commission.

Analysis

<table>
<thead>
<tr>
<th>Supra-local law</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No obligation to reduce land consumption</td>
<td>• Fix a land saving target in the spatial planning act</td>
</tr>
<tr>
<td>• Poor use of spatial planning instruments referring settlement structures (regulation of settlement areas, benchmarks and targets to reduce land consumption)</td>
<td>• Obligate planning authorities to determine and fix binding land saving targets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Town and country planning law</th>
<th>Priorities inner zone development as an aim</th>
</tr>
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<tbody>
<tr>
<td>• No binding requirements with respect to the reduction of land consumption</td>
<td>• Commit local authorities to establish strategies for reducing land use</td>
</tr>
<tr>
<td>• The legal requirements relating to soil or environmental protection are not capable to restrict land consumption effectively</td>
<td>• Implement instruments for information and management</td>
</tr>
<tr>
<td>• No legal guidelines for the planning decision that give an effective protection to the outer zone</td>
<td>• Restrict the exceptions in the outer zone (§ 35 BauGB)</td>
</tr>
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<thead>
<tr>
<th>Sectoral environ. planning law</th>
<th>Activate landscape planning for soil protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No independent system of planning dedicated to the non-substance-related protection of soil</td>
<td>• Improve procedure of determination, valuation and decision for soil-protecting aspects</td>
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<tr>
<td>• Insufficient attention to soil-protection aspects</td>
<td></td>
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<tr>
<td>• Insufficient involvement of the soil-protection authorities in the sectoral planning processes</td>
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<tr>
<th>Supporting instruments (SEA)</th>
<th>Enforce the duty to identify and value land consumptions concerns in the environmental report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All concerns are combined in the environmental report and are rated as one in the balancing commensuration, which increases their significance.</td>
<td>• Use the monitoring set of basic data to set a standard historic benchmark for the investigation and assessment of later plans in order to take proper account of the cumulative effects</td>
</tr>
</tbody>
</table>

ECOLOGICAL EFFECTS
- Invasion and fragmentation of nature
- Increase in noise pollution
- Sealing of the soil

ECONOMIC EFFECTS
- Density of settlement impacts the efficiency of technical supply and the accessibility of nearby areas
- Low density of settlement increases the per-capita costs of technical infrastructure

SOCIAL EFFECTS
- Expansion of settlements restricts the development options available to future generations
- Increase in social segregation

EXPERIMENTAL RECIPROCAL EFFECTS
- Expansion of settlements increases the level of traffic, which in turn requires land for new traffic infrastructure. The improved infrastructure gives rise to a greater demand for settlements in peripheral areas and thus to further development and land consumption.

Introduction

European Soil Protection

German Law as an Example: Research for the Federal Environmental Agency

Future Directions

Priorities of Research

Learning from the Research for the Federal Environmental Agency
- Be conservative: Use established protection-, management- and monitoring-instruments aimed at soil protection.
- Be strict: Work with land saving targets
- Be creative: Combine planning law with economic incentives like needs analysis estimate of infrastructural and planning effects, tradable allowances for the dedication of building land and utilize land use scenarios (Mix of instruments)

Future research should focus on problems
- Impacts for the new member states
- Renewable energy and land consumption
- Remediation and land consumption
- Coherent soil protection policy
- Megacities


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