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.



### **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

#### **Exponential 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.

# **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** COM (2006) 232

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 soils 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.

			General Spatial Planning for instance: Landscape Plan
	Analysis	Recommendations	Federal spetial planning Guetieries for spatial planning State spetial planning State spetial planning Each development plan Each development plan
Supra- local law	No obligation to reduce land consumption Poor use of spatial planning instruments referring settlement structures (regulation of settlement areas, benchmarks and targets to reduce land consumption)	Fix a land saving target in the spatial planning act     Obligate planning autho- rities to determine and fix binding land saving targets	The development plan  Regional planning Regional plan  Regional pl
Town and country planning law	No binding requirements with respect to the reduction of land consumption The legal requirements relating to soil or environmental protection are not capable to restrict land consumption effectively No legal guidelines for the planning decision that give an effective protection to the outer zone	Priorities inner zone development as an aim Commit local authorities to establish strategies for recilimplement instruments for interestrict the exceptions in the Strictly apply the soil-protect.	nformation and mangagement ne outer zone (§ 35 BauGB)
Sectoral environ. planning law	No independent system of planning dedicated to the non-substance-related protection of soil Insufficient attention to soil-protection aspects Insufficient involvement of the soil-protection authorities in the sectoral planning processes	Activate landscape planning for soil protection Improve procedure of determination, valuation and decision for soil-protecting aspects	
Supporting instruments (SEA)	All concerns are combined in the environmental report and are rated as one in the balancing commensuration, which increases their significance.  Monitoring ensures a continuous supervision of the chain of cause-and-effect and can therefore identify successive land consumptions	Enforce the duty to identify and value land consumptions concerns in the environmental report     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	

### Learning from the Research for the Federal Environmental Agency

- Be conservative: Use established protection-, management- and monitoringinstruments 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

Ref.: Köck et. al.: Activating Spatial Planning Law: Options for the Reduction of Land Consumption. In: Journal for European Environmental & Planning Law (JEEPL) 01/2007, pp .2 - 16.

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Introduction