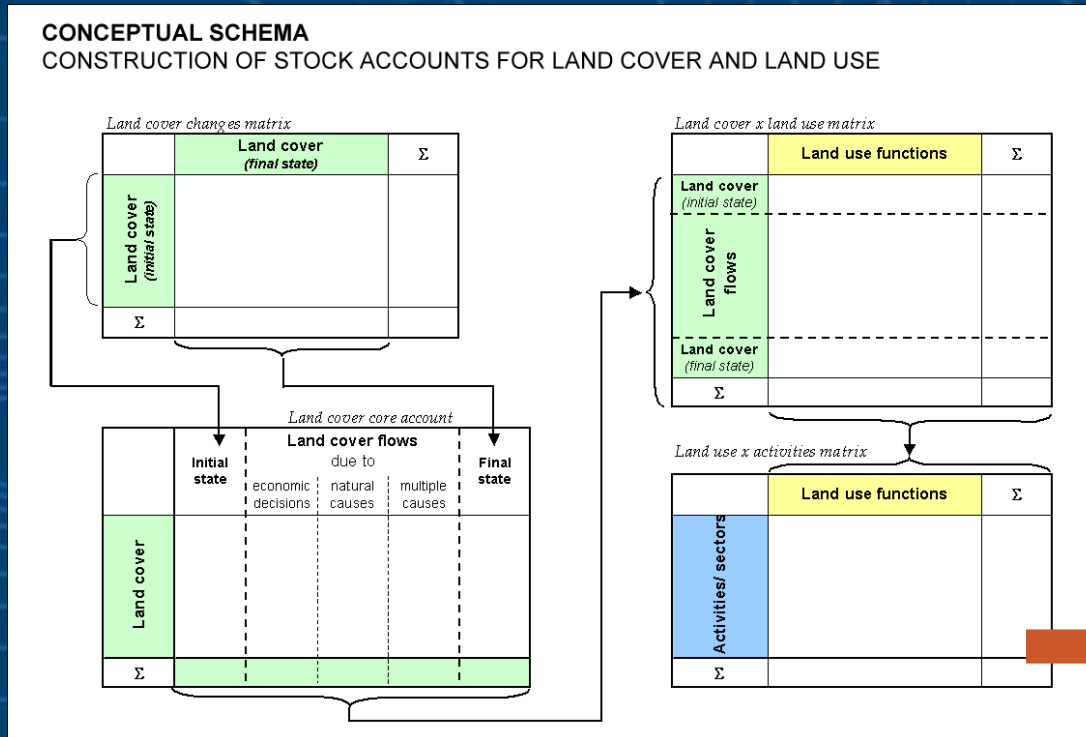


# Land Use Functions & Accounts

## Urban Landscape

# LEAC Urban – framework (basic accounts)



- Matrix of Land Cover Change
- Account of Land Cover Change
- Account of Consumption and Formation of Land Cover
- Account of Use of Land Cover Resource (Mixed Table)

Targeted (Supplementary) Accounts via LU functions

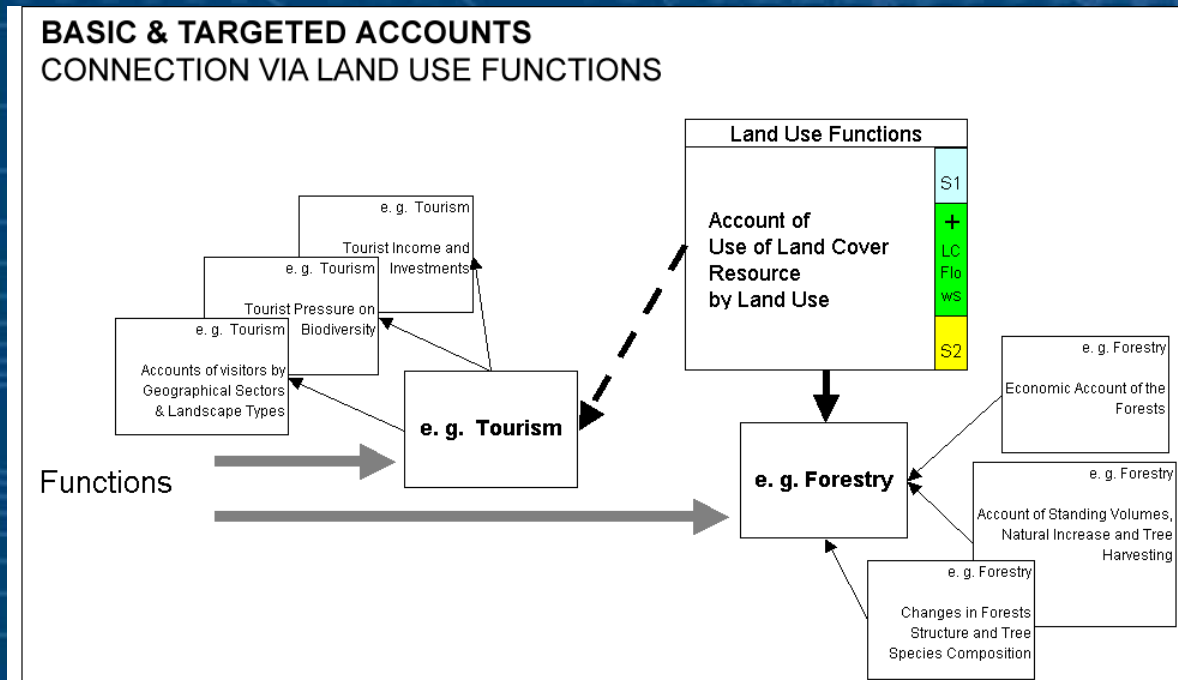
**GENERAL CONCEPT OF FLOW ACCOUNTS**



DO GAINS COMPENSATE LOSSES?  
DOES QUALITY OF STOCK CARRIED OVER CHANGE?  
WHICH ARE THE PROCESSES IN QUESTION?

- Land Cover Flow Matrix -> relevant flows
- Flows expressed as processes on the basis of the analysis of elementary pairs of consumption and formation of land cover type. Hierarchical grouping provides a very useful interpretation of the individual CLC changes.

# LEAC Urban – framework *(targeted accounts)*



- *based on the concept of the Land Use Functions*
- *formally connected to land cover accounts in terms of total stock use as well as land cover consumptions*
- *flexible to address individual functions in way to match policy requirements in terms of environmental, economic or social data*

# LEAC Urban – framework *(land use functions)*

- UF1 Residence, incl. services      Targeted Accounts for Urban
- UF2 Commerce
- UF3 Transport
- UF4 Industrial production
- UF5 Energy production
- UF6 Mining & quarrying
- UF7 Waste dumping
- UF8 Water management
- UF9 Farming, food production
- UF10 Forestry
- UF11 Tourism & Recreation
- UF12 Nature conservation
- UF13 Other uses

# LEAC Urban – framework *(land use functions)*

UF1 Residence, incl. services

UF2 Commerce

UF3 Transport

UF4 Industrial production

UF5 Energy production

UF6 Mining & quarrying

UF7 Waste dumping

UF8 Water management

UF9 Farming, food production

UF10 Forestry

UF11 Tourism & Recreation

UF12 Nature conservation

UF13 Other uses

## Targeted Accounts for Urban



- *have to reflect main functions:*  
*UF01 - Residence, incl. services*

# LEAC Urban – framework *(land use functions)*

UF1 Residence, incl. services

UF2 Commerce

UF3 Transport

UF4 Industrial production

UF5 Energy production

UF6 Mining & quarrying

UF7 Waste dumping

UF8 Water management

UF9 Farming, food production

UF10 Forestry

UF11 Tourism & Recreation

UF12 Nature conservation

UF13 Other uses

## Targeted Accounts for Urban



- *have to reflect main functions:  
UF01 - Residence, incl. services*
- *but have to consider also other functions  
of urbanised land*

# LEAC Urban – framework *(land use functions)*

## Urban functions

### ***Residential function***

Housing  
Urban transport/mobility  
Public services, private services  
Recreation

### ***Industrial & trade function***

Manufacturing  
Trade activities  
Industrial services  
Mines & Quarries

### ***Regional/External urban function***

Transport (infrastructure, traffic)  
Dump sites  
Water supply

## Land Use functions

UF01 Residence, incl. services  
UF03 Transport  
UF01 Residence, incl. services  
UF11 Recreation & Tourism

UF04 Industrial production  
UF02 Commerce  
UF04 Industrial production  
UF06 Mining & quarrying

UF03 Transport  
UF07 Waste dumping  
UF08 Water management

# LEAC Urban – framework (BA & TA linkage)

Use of Land Cover Resource by Land Use Functions	UF1 Residential, incl. services	UF2 Commercial	UF3 Transport	UF4 Industrial production	UF5 Energy production	UF6 Mining & quarrying	UF7 Waste dumping	UF8 Water management	UF9 Farming, food production	UF10 Forestry	UF11 Tourism & Recreation	UF12 Nature conservation	UF13 Other uses	ADJUSTMENT FOR MULTIPLE USES	TOTAL
<b>Initial surface</b>															
1 Artificial surfaces															
2.1+2.2 Arable Land & Permanent Crops															
2.3+2.4 Pastures & Mixed agricultural areas															
3.1 Forests															
3.2+3.3 Shrub and other semi-natural land															
4 Wetlands															
5 Water bodies															
<b>A - TOTAL INITIAL SURFACE ~1975</b>															
<b>Net Formation of Land Cover by Use</b>															
LCF1 Urban land management															
LCF2 Urban sprawl															
LCF3 Extension of economic sites and infrastructures															
LCF4 Agricultural rotation and intensification															
LCF5 Conversion of land to agriculture															
LCF6 Forests creation and management															
LCF7 Water body creation and management															
LCF8 Changes of Land Cover due to natural and multiple causes															
<b>B - TOTAL Net Formation of Land Cover</b>															
<b>Net Extension of Use without Formation of Cover</b>															
1 Artificial surfaces															
2.1+2.2 Arable Land & Permanent Crops															
2.3+2.4 Pastures & Mixed agricultural areas															
3.1 Forests															
3.2+3.3 Shrub and other semi-natural land															
4 Wetlands															
5 Water bodies															
<b>C - TOTAL Net Extension of Use without Formation of Cover</b>															
<b>Final Surface</b>															
1 Artificial surfaces															
2.1+2.2 Arable Land & Permanent Crops															
2.3+2.4 Pastures & Mixed agricultural areas															
3.1 Forests															
3.2+3.3 Shrub and other semi-natural land															
4 Wetlands															
5 Water bodies															
<b>D - TOTAL FINAL SURFACE ~1990 (D = A+B+C)</b>															



# LEAC Urban – framework *(targeted accounts)*

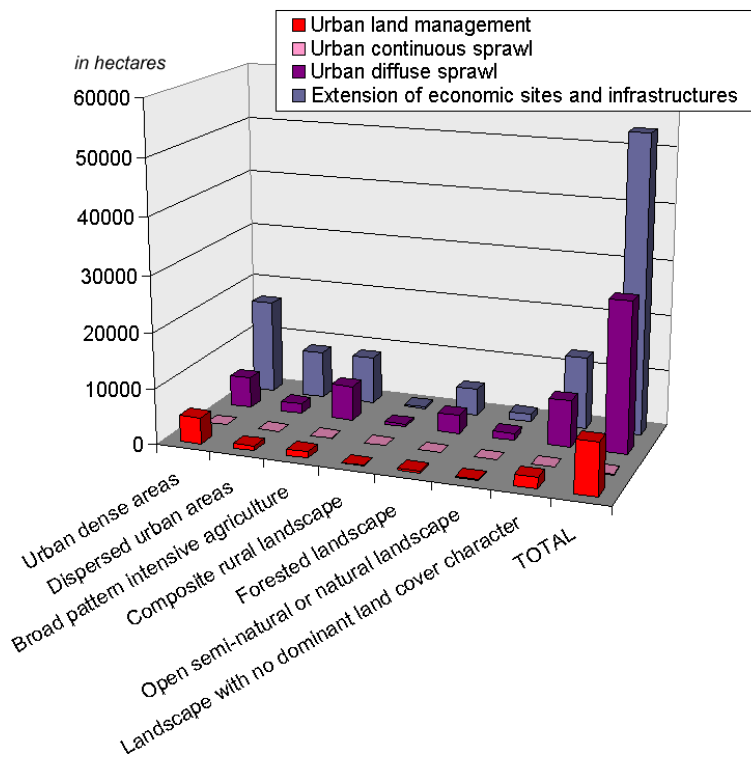
- **3 considerations / constraints**

- ✓ functions to be addressed to meet policy requirements
- ✓ units (scale) to be addressed to meet policy requirement
- ✓ statistical data availability

# Examples

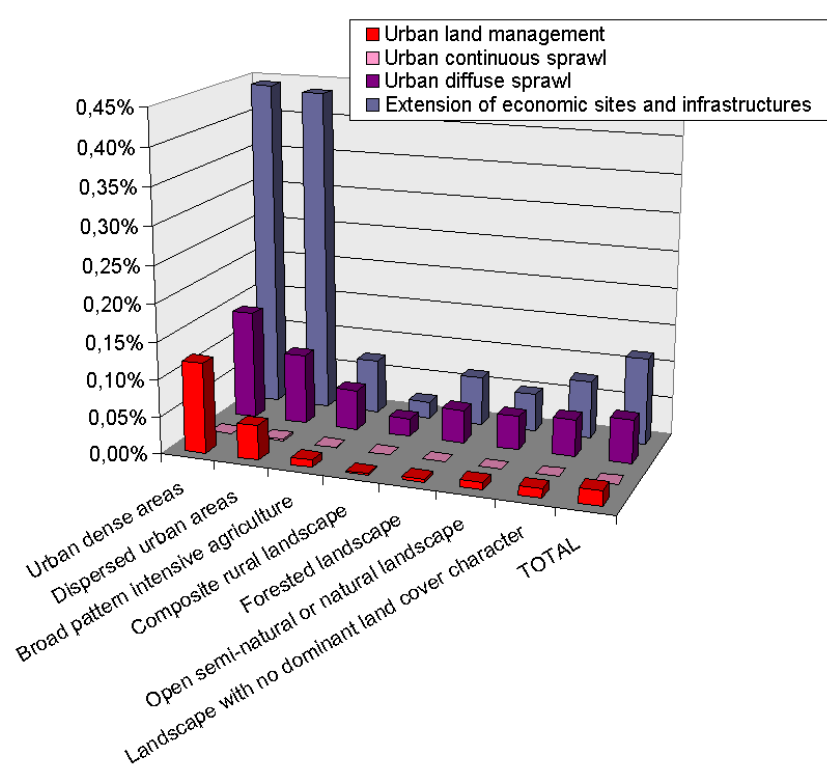
## URBAN EXTENSION & MANAGEMENT

4 CEE COUNTRIES 1975/1990, Surface by Landscape Types



## URBAN EXTENSION & MANAGEMENT

4 CEE COUNTRIES 1975/1990, % of total area by Landscape Types



**Thank you !**