

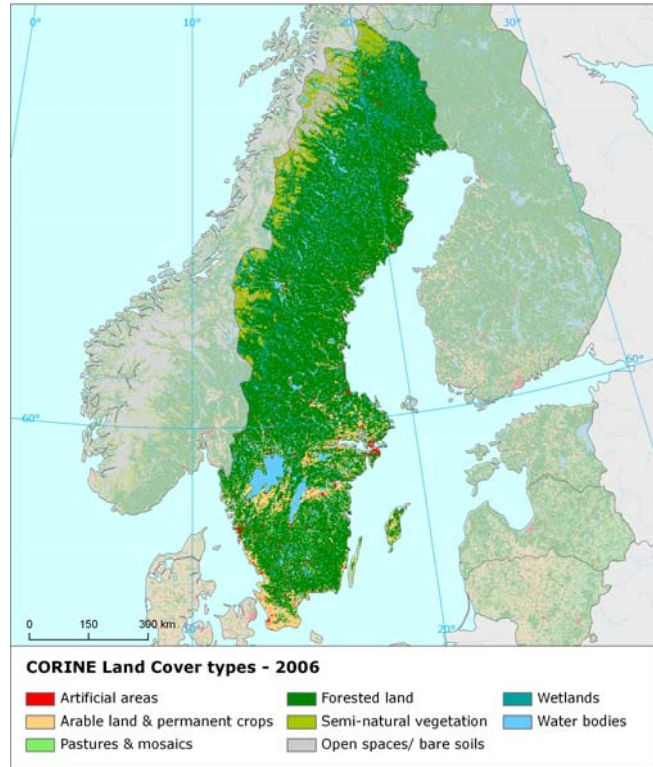
# Sweden

## Land cover 2006

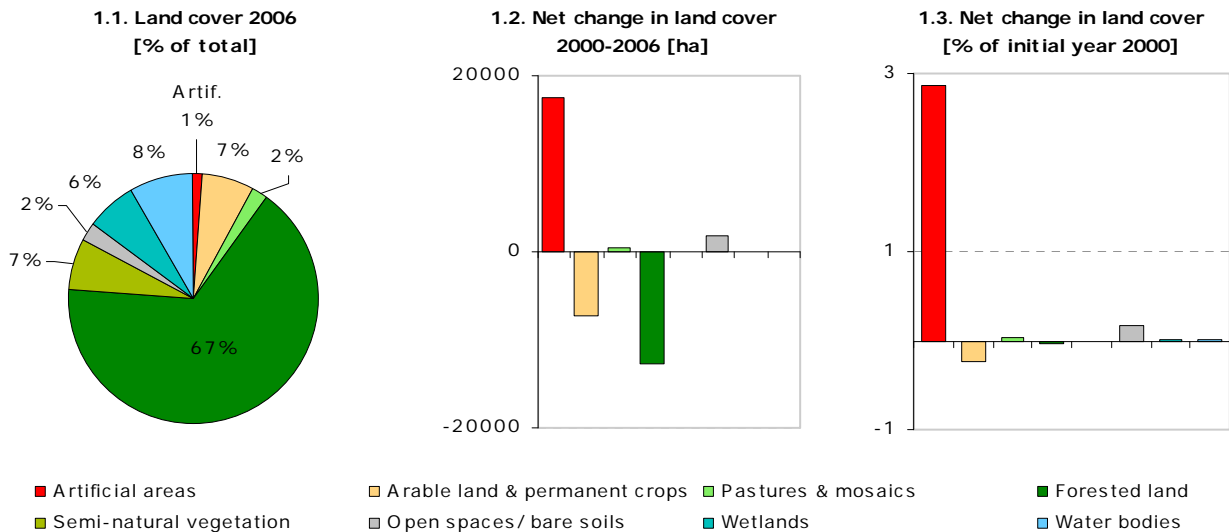
### Overview of land cover & change 2000-2006

The landscape in Sweden is characteristic by predominant share of natural land cover, mostly forested land and water bodies. The development of land cover in Sweden is driven mainly by internal forest changes between transitional woodlands and standing forests. Besides these changes, sprawl of economic sites and infrastructures is the most significant flow in Swedish landscape. Mostly forests and arable land have been taken by artificial sprawl during the period 2000-2006.

Concerning the spatial distribution of changes, conversions of forested land are scattered over almost the whole Sweden where forestry activities take place, with the exception of the northernmost part of the country (which is covered mainly by dry semi-natural vegetation or bare rocks). Artificial land take is situated mostly in the southern more densely populated part of the country, especially into surroundings of the capital city Stockholm, Malmo and other major cities. In addition, there is also significant concentration of economic/infrastructure sprawl in the north, related to new highways construction.



Note: The results presented here are based on a change analysis of 44 land cover types mapped consistently on a 1:100,000 scale across Europe over almost two decades 1990-2006 - see Corine land cover (CLC) programme for details. Number of years between CLC2000-CLC2006 data for Sweden: 6



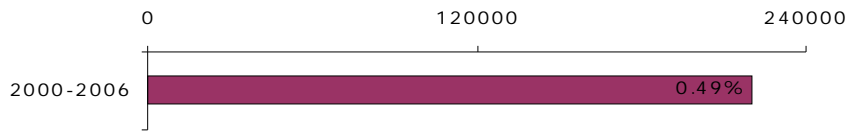
### Summary balance table 2000-2006

	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
<b>Land cover 2000</b>	6114	30014	9454	296473	29549	10950	28858	37419	448831
Consumption of initial LC	27	80	15	13110	0	1	3	2	13236
Formation of new LC	202	7	19	12982	0	20	3	3	13236
<b>Net Formation of LC</b>	<b>175</b>	<b>-73</b>	<b>4</b>	<b>-127</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>1</b>	<b>0</b>
Net formation as % of initial year	2.9	-0.2	0.0	0.0	0.0	0.2	0.0	0.0	
<b>Total turnover of LC</b>	<b>228</b>	<b>87</b>	<b>35</b>	<b>26092</b>	<b>0</b>	<b>20</b>	<b>6</b>	<b>4</b>	<b>26473</b>
Total turnover as % of initial year	3.7	0.3	0.4	8.8	0.0	0.2	0.0	0.0	5.9
<b>Land cover 2006</b>	<b>6289</b>	<b>29942</b>	<b>9457</b>	<b>296346</b>	<b>29549</b>	<b>10969</b>	<b>28859</b>	<b>37420</b>	<b>448831</b>

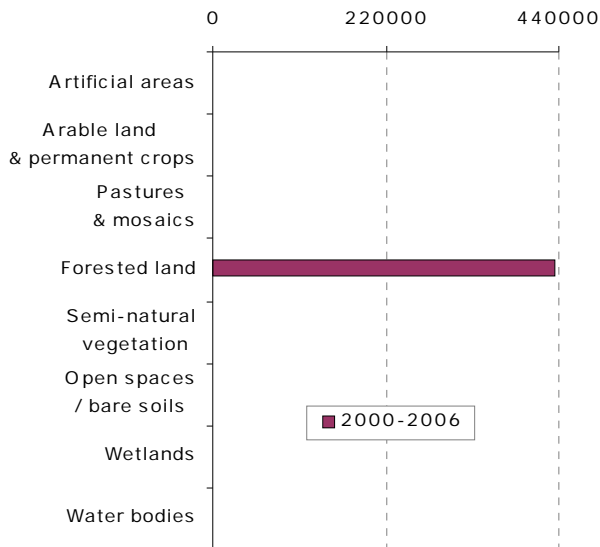
# Sweden

## Land cover trends 2000-2006

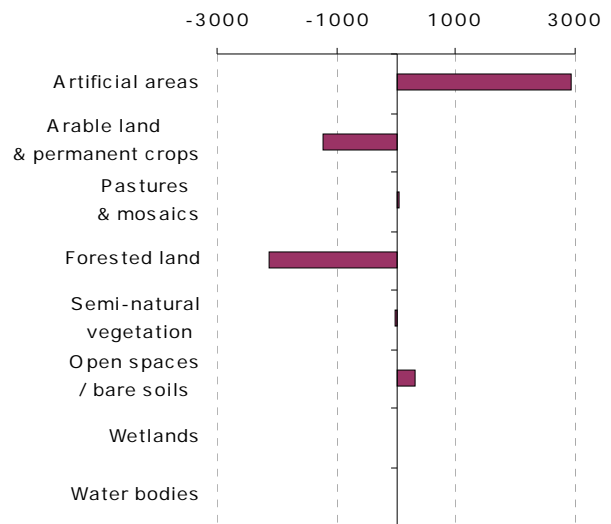
2.4. Annual land cover change  
[ha/year, % of total area]



2.5. Annual turnover of LC types  
[ha/year]

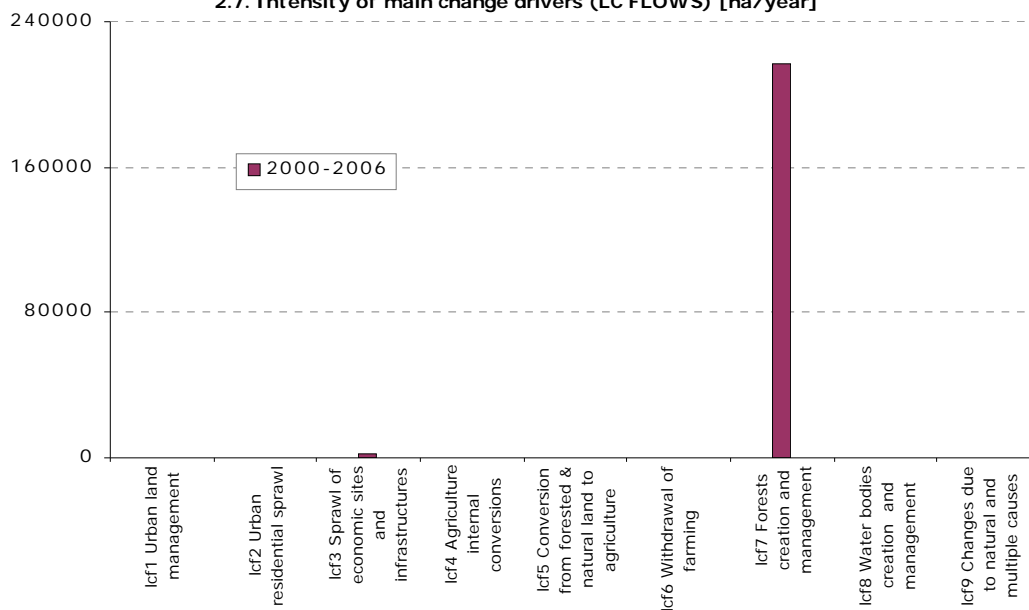


2.6. Net annual change of LC types [ha/year]

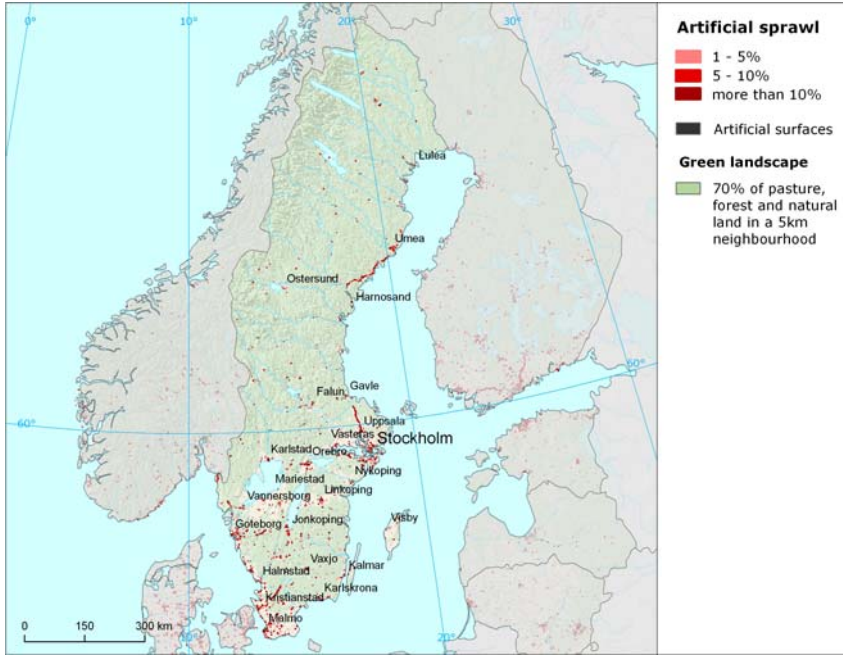


Summary trend figures		2000-2006
Annual land cover change [ha/year]		220606
Annual land cover change as % of initial year		0.49%
Land uptake by artificial development as mean annual change [ha/year]		2945
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]		1163
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]		-1
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]		-210
Forest & other woodland net formation as mean annual change [ha/year]		-2119
Dry semi-natural land cover net formation as mean annual change [ha/year]		318
Wetlands & water bodies net formation as mean annual change [ha/year]		21

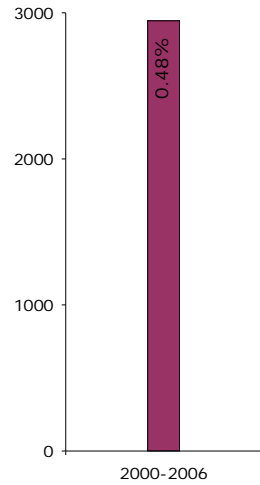
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



### Artificial areas



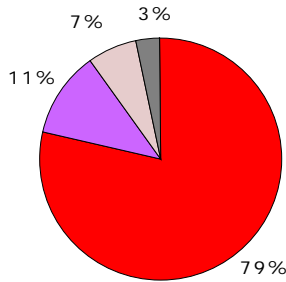
3.8. Artificial land take [ha/year, % of initial year]



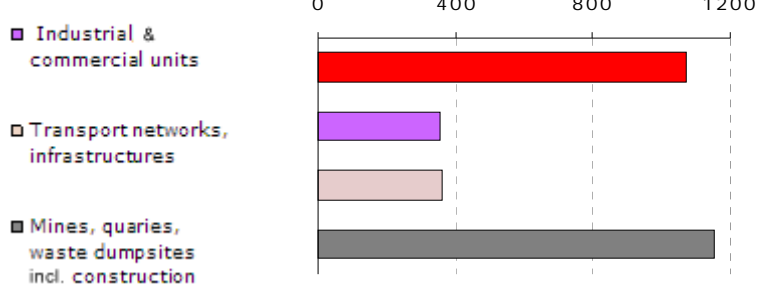
### Dynamic, but moderate development of artificial land

Beside forest internal conversion, artificial land take is the most important driver of land cover development in Sweden. The uptake is driven mostly by sprawl of sport and leisure facilities (23%) and construction sites (23%) (which indicates potential of further extension of artificial development in the future), by sprawl of diffuse residential fabric (15%), commercial and industrial sites (12%), transport networks (highway construction) (11%) and mines and quarrying areas (13%). Mostly forested areas, followed by agriculture with prevailing share of arable land have been taken by the sprawl. Besides the land take, there is also significant amount of artificial exchange through recycling (represented mostly by conversion of construction sites into transport units) and infilling or development of sport and leisure facilities. Artificial land take is situated mostly in the southern more densely populated part of the country, especially into surroundings of the capital city Stockholm, Malmö and other major cities. In addition, there is also significant concentration of economic/infrastructure sprawl in the north, related to new highways construction.

3.9. Artificial surfaces 2006 [% of total area]



3.10. Artificial land take 2000-2006 [ha/year]

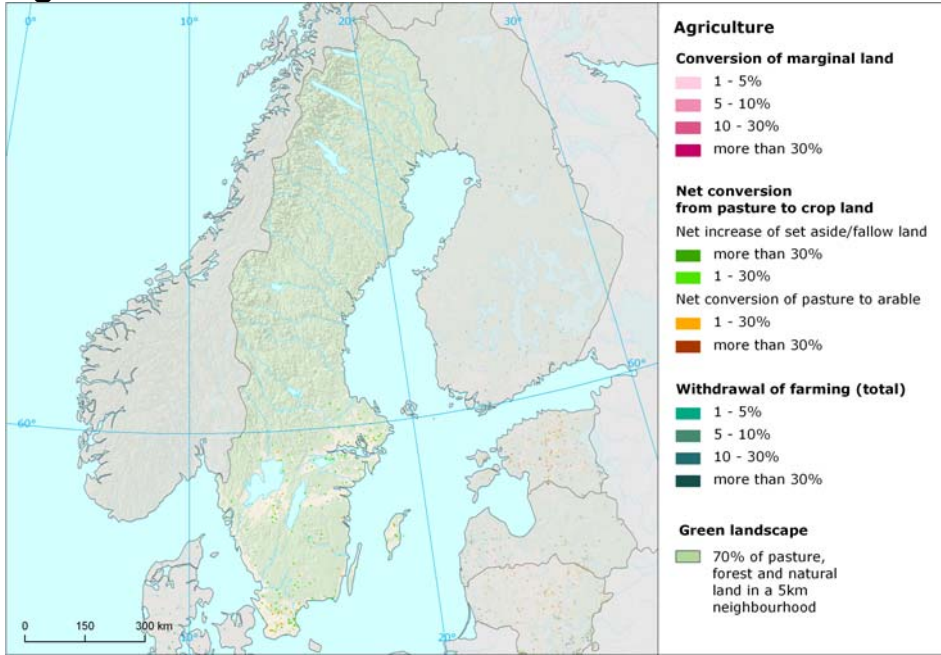


3.11. Mean annual artificial change by class [ha/year]



# Sweden

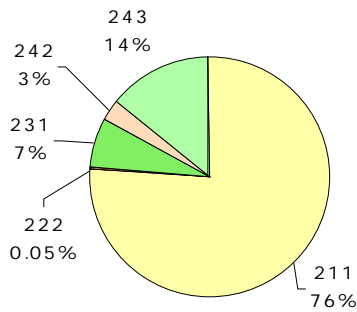
## Agriculture



### Consumption of arable land

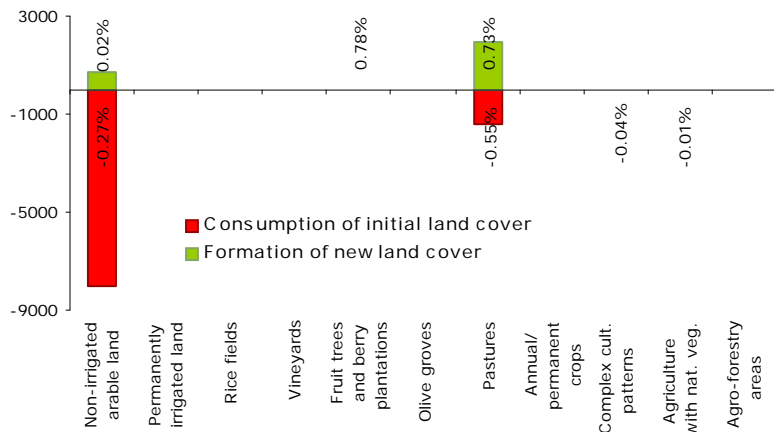
Agricultural land in Sweden consists mostly of arable land (more than ¾ of total agricultural area) followed by agriculture with natural vegetation and pastures. While pastures have almost steady balance of net formation, arable land has negative balance with prevailing consumption of land cover in period 2000-2006. It is caused by consumption by artificial sprawl (see above), which occurs mostly over arable land. There is also certain amount of newly formatted agricultural land, which has been created from former construction sites or forest areas. Consumption of arable land is caused also by internal agricultural conversions, which are characterized by prevailing share of extension of pasture over opposite conversion to arable land. Geographically, agricultural conversions occur mainly in southern part of the country.

4.12. Agricultural areas 2006 [% of total area]

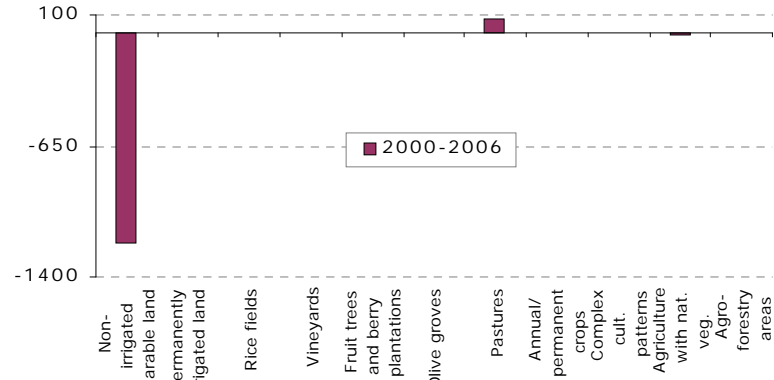


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas of natural vegetation
- 244 Agro-forestry areas

4.13. Development of agricultural areas 2000-2006 – detailed balance [ha]

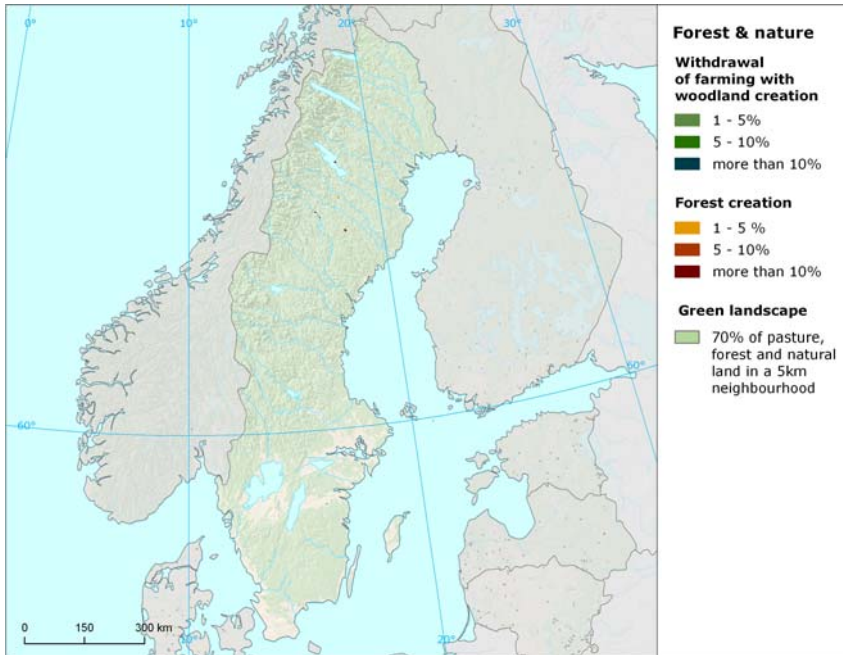


4.14. Mean annual agricultural change by class [ha/year]

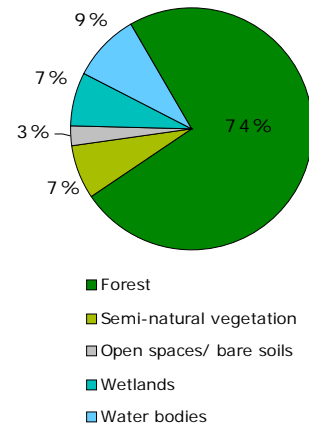


## Forest & nature

# Sweden



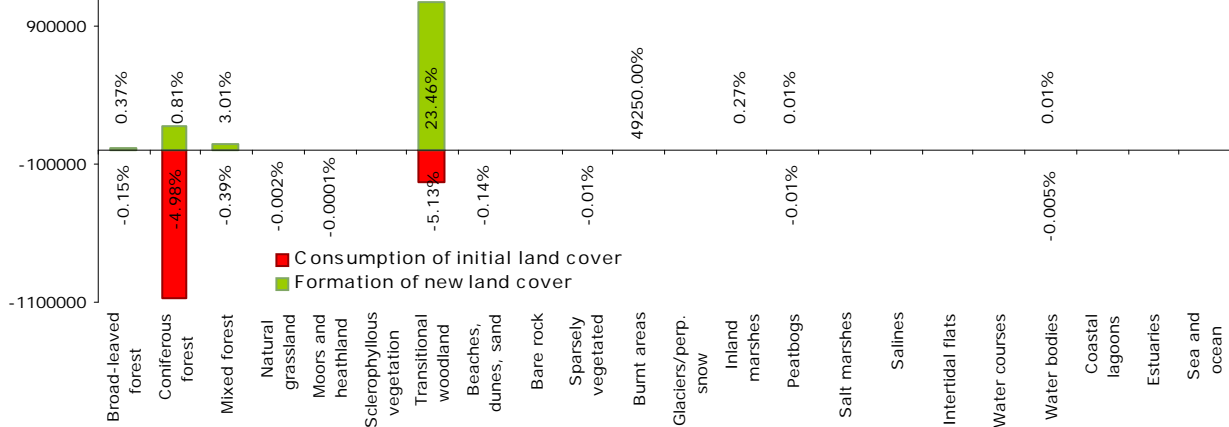
5.15. Forest & nature areas 2006 [% of total area]



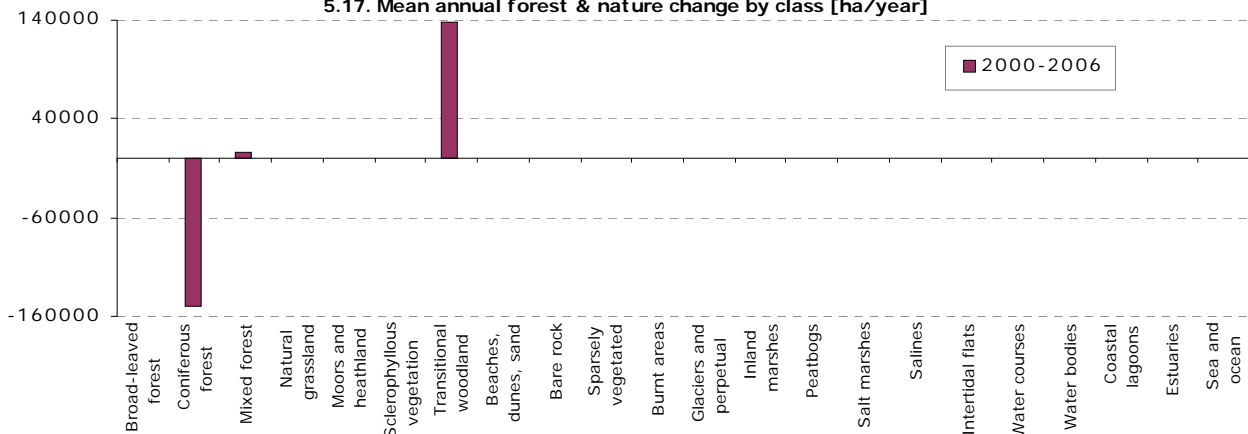
## Forest internal conversions

Natural areas cover most of Swedish country, with prevailing share of coniferous forest and transitional woodland, followed by moors and heathland, sparsely vegetated areas, peatbogs and water bodies. Most of natural exchange is driven by internal conversions between transitional woodland and standing forests due to forestry activities. Natural areas (mainly forests) have been also consumed by artificial sprawl with prevailing share of construction and mineral extraction sites sprawl. The other drivers of natural land cover development are forests and shrub fires, water bodies creation (mainly on expense of arable land) and semi-natural rotation (represented by conversion of water bodies to inland marshes).

5.16. Development of forest & nature areas 2000-2006 – detailed balance [ha]



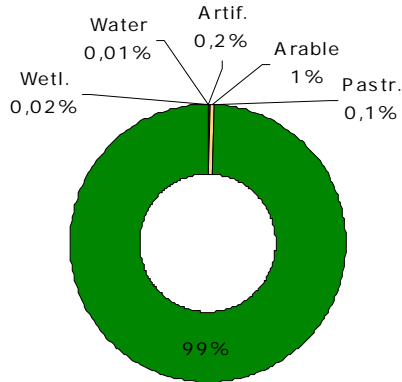
5.17. Mean annual forest & nature change by class [ha/year]



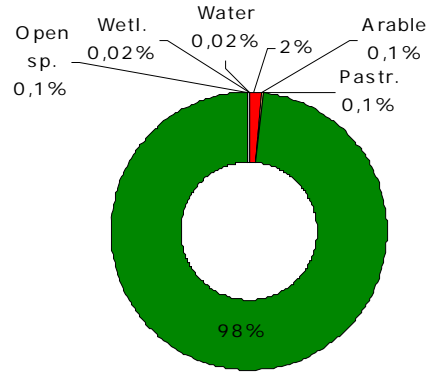
Annex: Land cover flows and trends

Land cover flows 2000-2006

6.18. Consumption of land cover 2000-2006 [% of total change area]

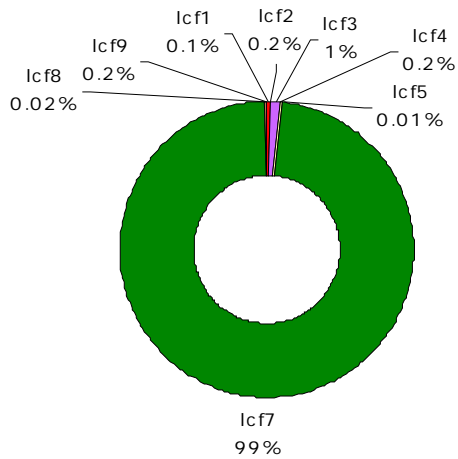


6.19. Formation of land cover 2000-2006 [% of total change area]



- Artificial areas
- Arable land & permanent crops
- Pastures & mosaics
- Forested land
- Semi-natural vegetation
- Open spaces/ bare soils
- Wetlands
- Water bodies

6.20. Drivers of change (LC FLOWS) 2000-2006 [% of total change area]

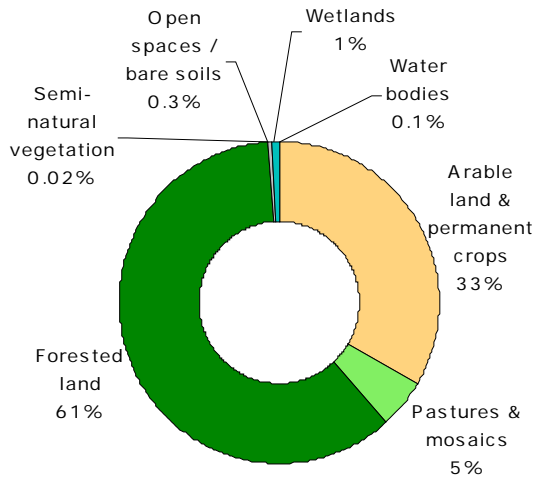


- Icf1 Urban land management
- Icf2 Urban residential sprawl
- Icf3 Sprawl of economic sites and infrastructures
- Icf4 Agriculture internal conversions
- Icf5 Conversion from forested & natural land to agriculture
- Icf6 Withdrawal of farming
- Icf7 Forests creation and management
- Icf8 Water bodies creation and management
- Icf9 Changes due to natural and multiple causes

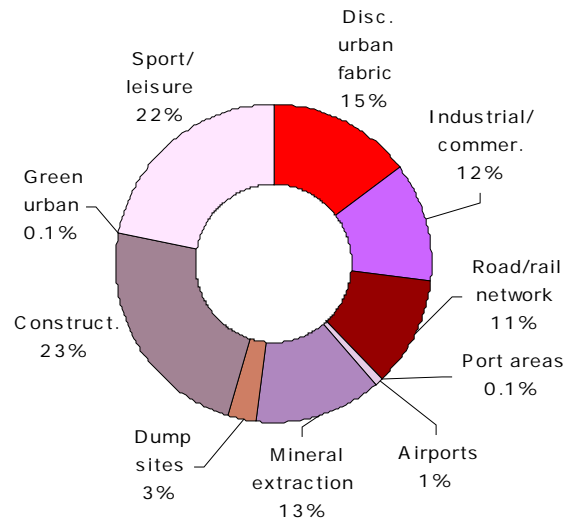
# Sweden

## Artificial areas

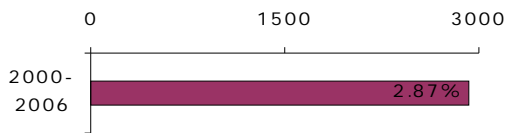
7.21. Consumption by artificial land take 2000-2006 [% of total]



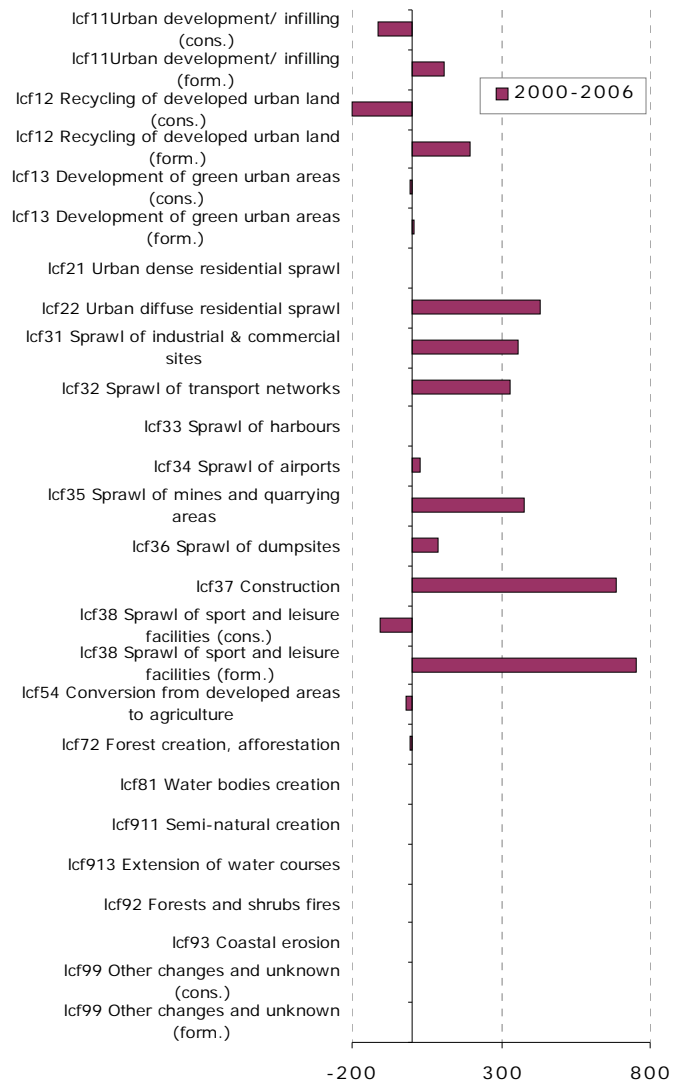
7.22. Formation by artificial land take 2000-2006 [% of total]



7.23. Net formation of artificial area [ha/year, % of initial year]



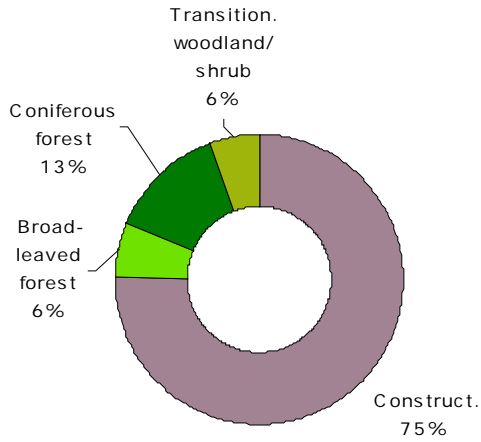
7.24. Artificial development by change drivers (LC FLOWS) [ha/year]



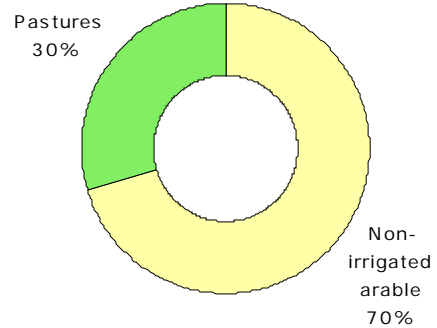
# Sweden

## Agriculture

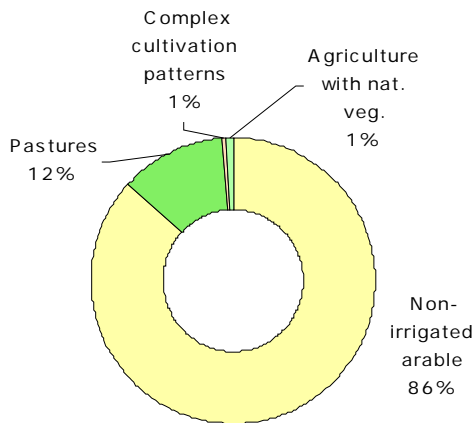
8.25. LC consumed by agriculture 2000-2006 [% of total]



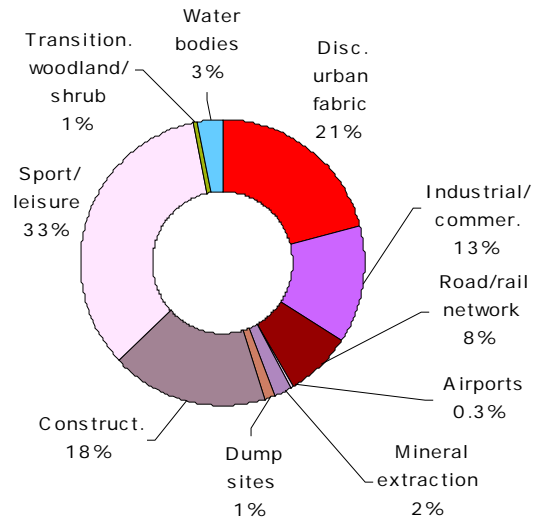
8.26. Formation of agricultural land from non-agriculture 2000-2006 [% of total]



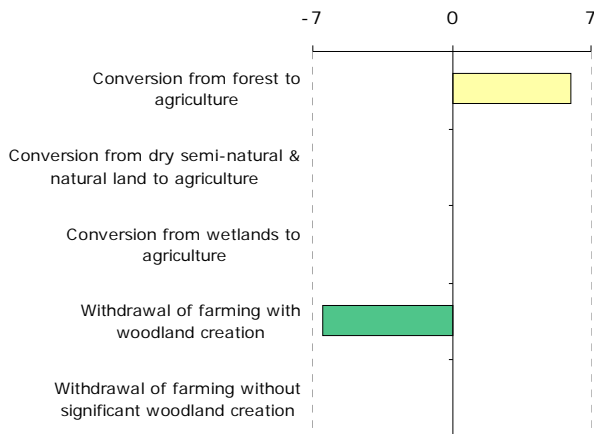
8.27. Consumption of agricultural land by non-agriculture 2000-2006 [% of total]



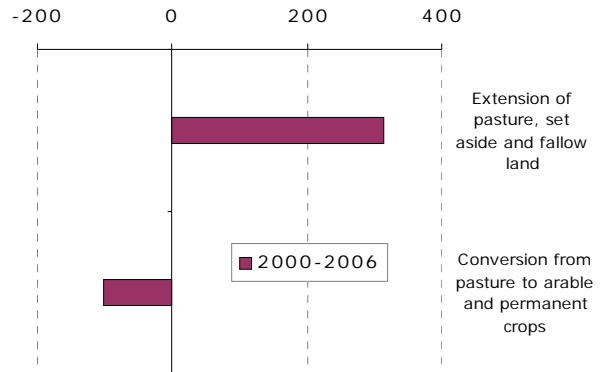
8.28. Formation of non-agricultural land from agriculture 2000-2006 [% of total]



8.29. Main annual conversions between agriculture and forests & semi-natural land 2000-2006 [ha/year]



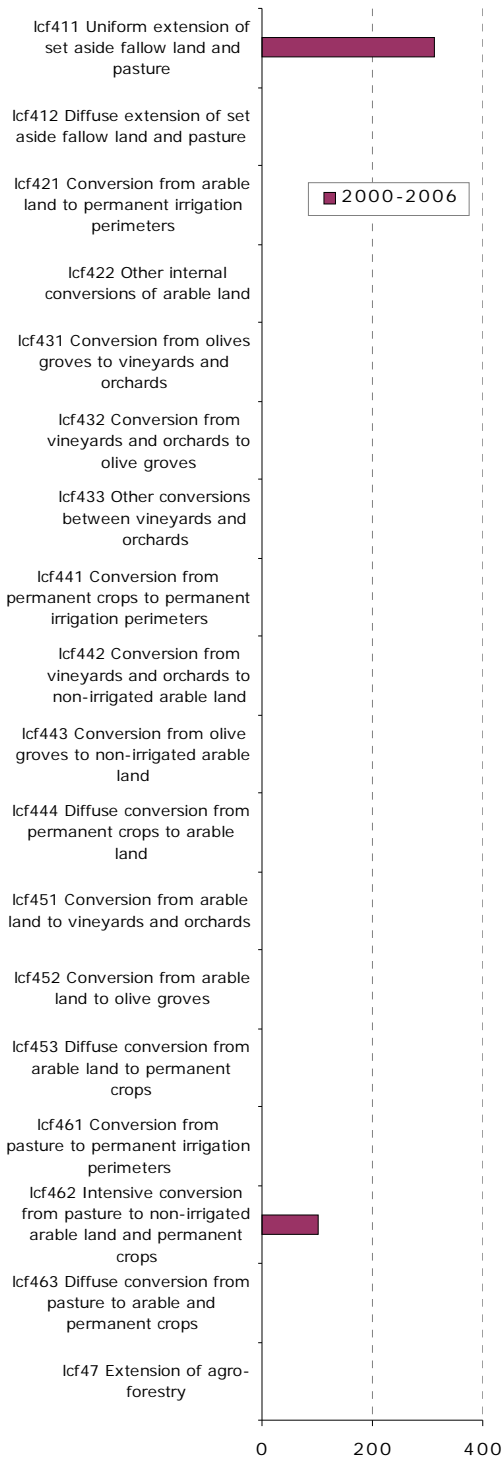
8.30. Mean annual conversion between arable land and pasture [ha/year]



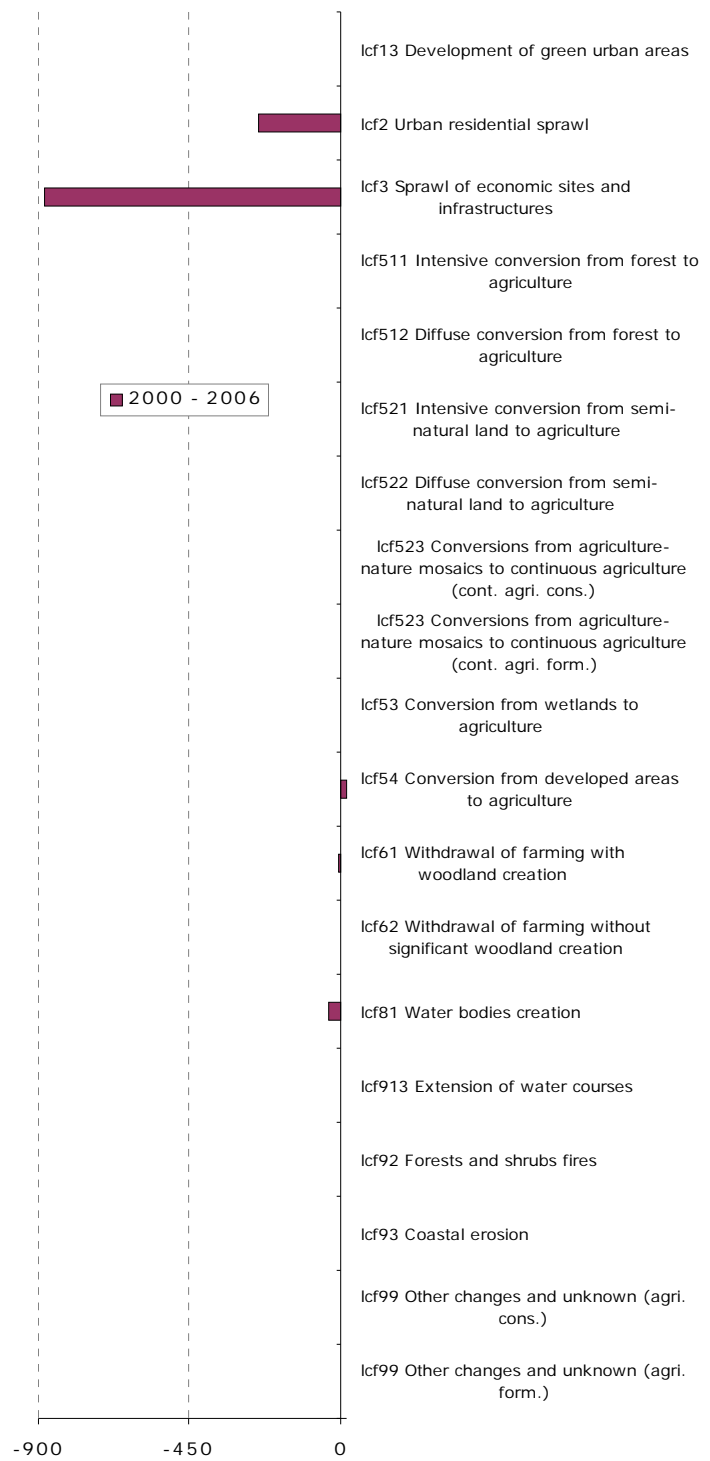


# Sweden

9.31. Mean annual agriculture internal conversions [ha/year]



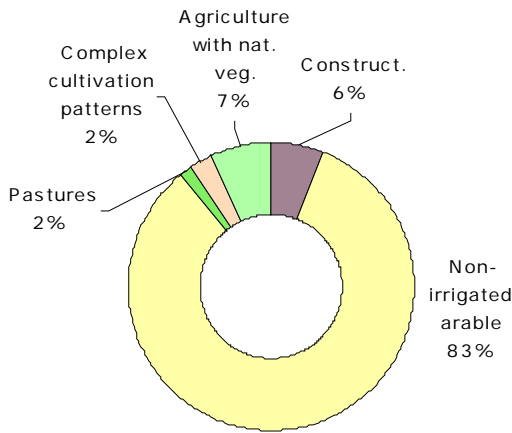
9.32. Mean annual conversions between agriculture and other LC types [ha/year]



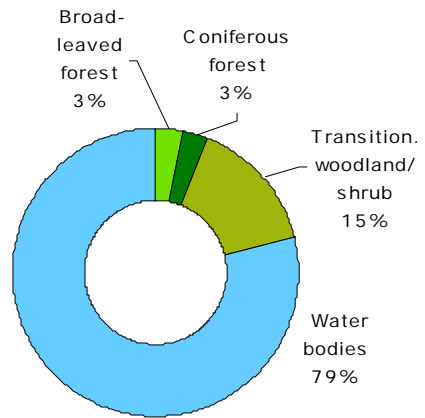
# Sweden

## Forest & nature

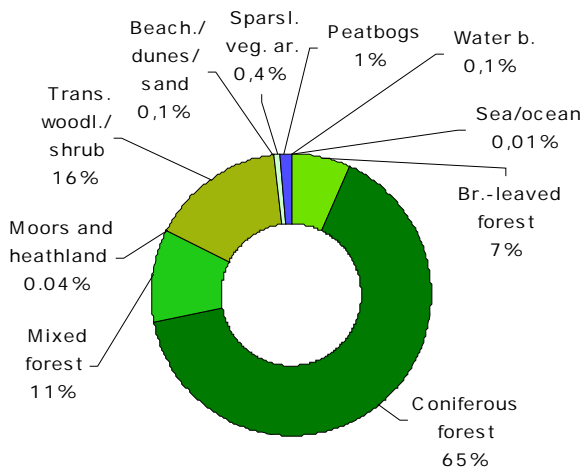
10.33. LC consumed by forest & nature 2000-2006 [% of total]



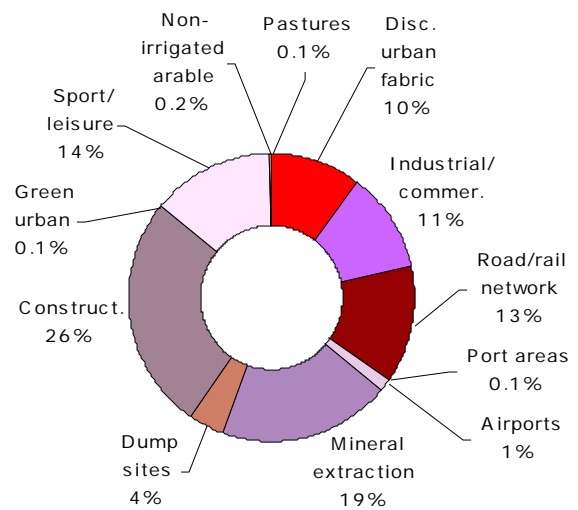
10.34. Formation of forest & nature land from non-forest /nature 2000-2006 [% of total]



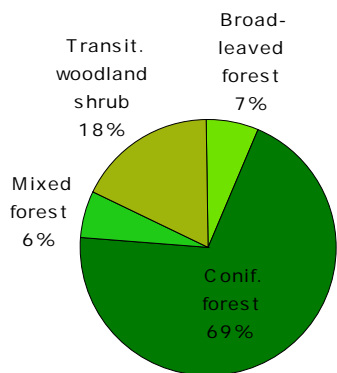
10.35. Consumption of forest & nature land by non-forest/nature 2000-2006 [% of total]



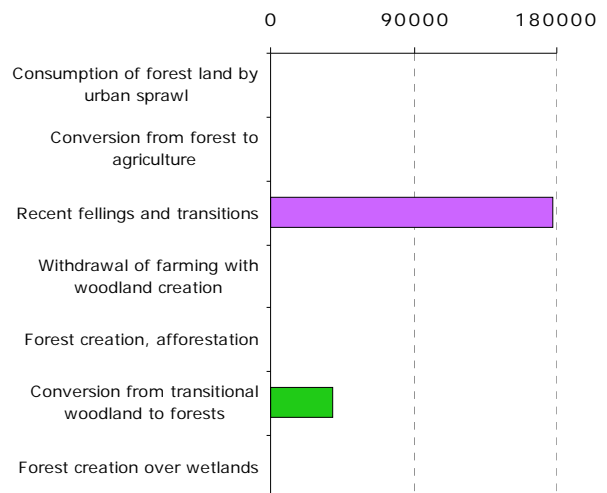
10.36. Formation of non-forest/nature land from forest & nature 2000-2006 [% of total]



10.37. Forested land 2006 [% of total area]

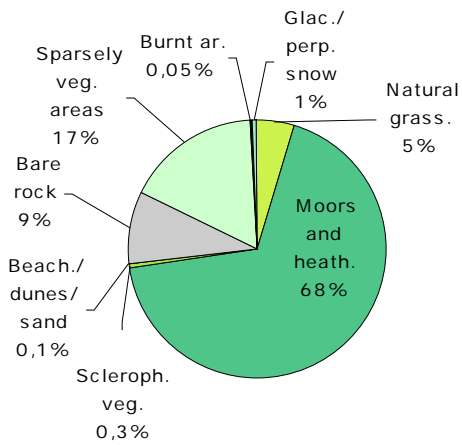


10.38. Main trends in woodland & forests consumption/formation 2000-2006 [ha/year]

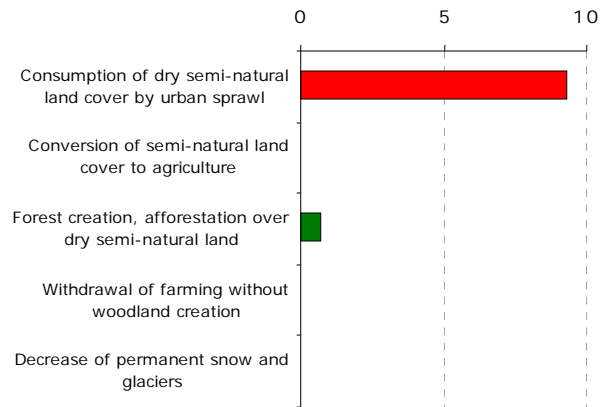


# Sweden

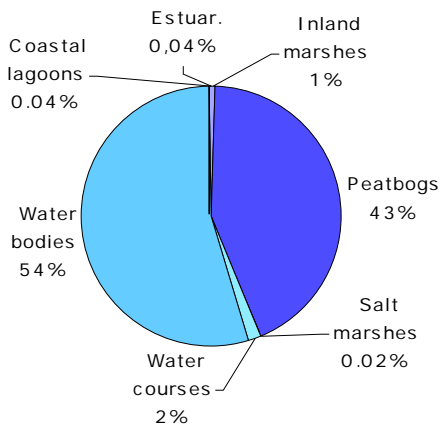
**11.39. Dry semi-natural areas 2006**  
[% of total area]



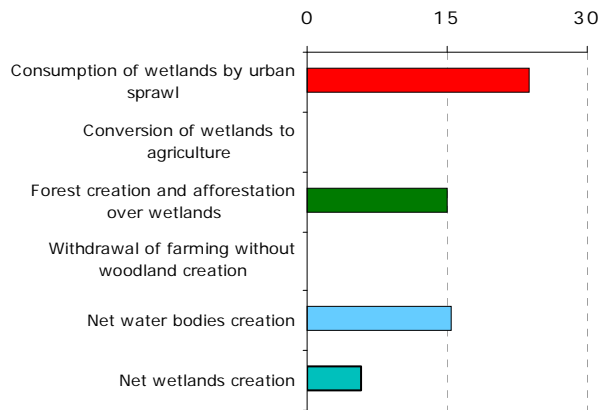
**11.40. Main trends in dry semi-natural land consumption/formation 2000-2006 [ha/year]**



**11.41. Wetlands & water 2006**  
[% of total area]



**11.42. Main trends in wetlands & water consumption/formation 2000-2006 [ha/year]**



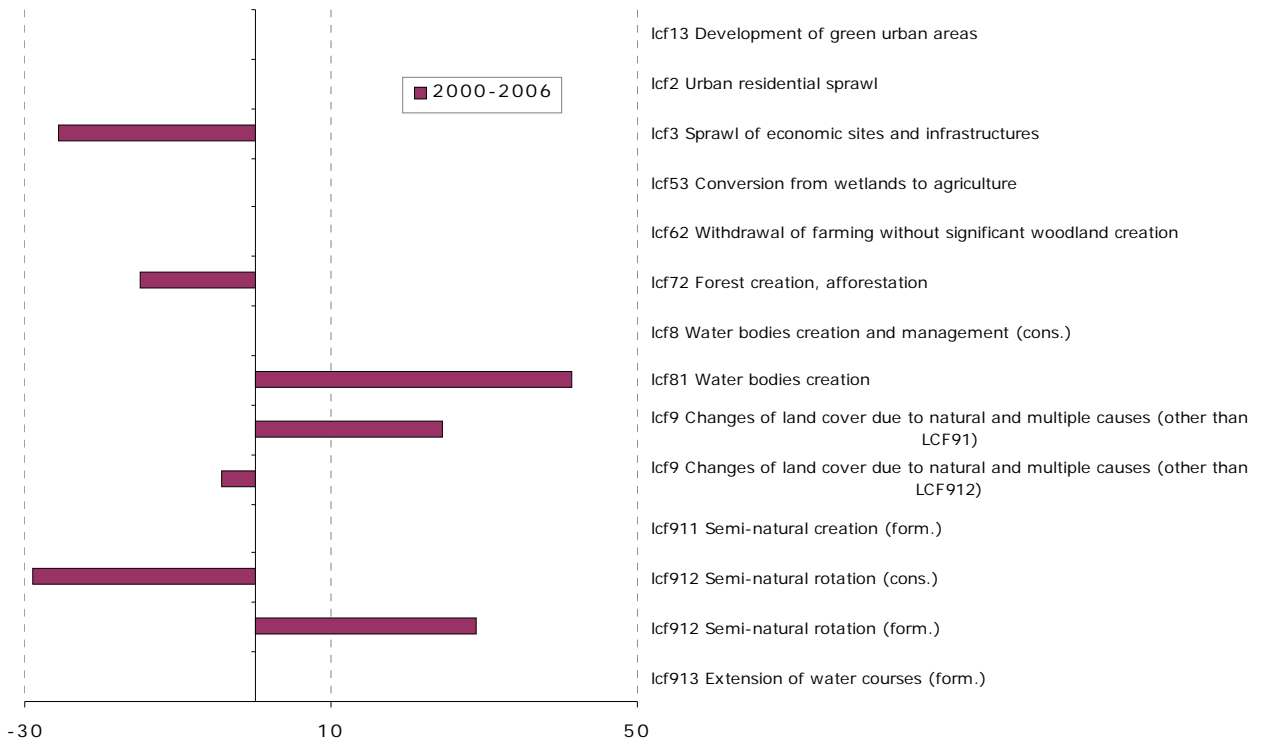
**11.43. Mean annual conversions of forest & other woodland [ha/year]**



12.44. Mean annual conversions of dry semi-natural LC [ha/year]



12.45. Mean annual conversions of wet lands and water LC [ha/year]



# Sweden

