

Ireland

Land cover 2006

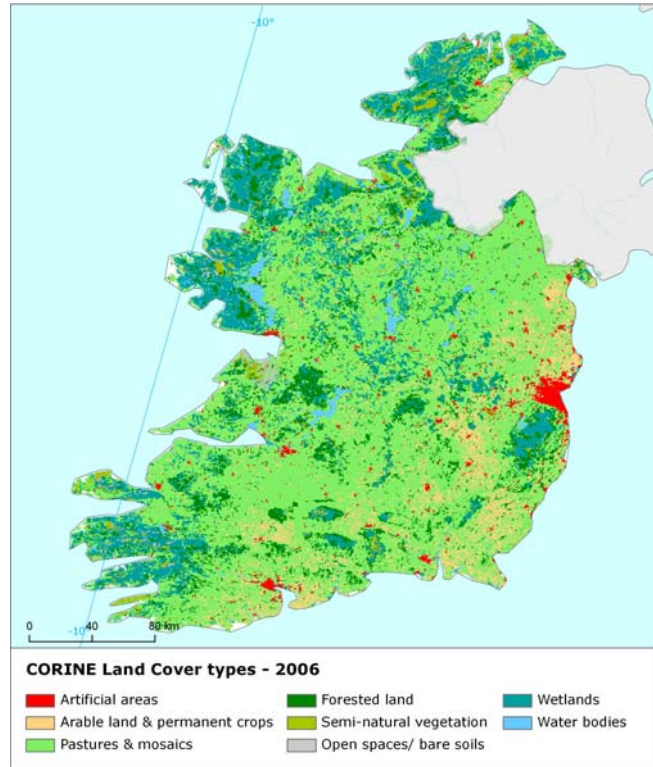
Overview of land cover & change 2000-2006

The Irish landscape (dominated by pastures and peatlands) shows to be less dynamic during this period as average yearly land cover change rate decreased twice (to 0,38% per year) compared to the previous period 1990-2000. This decrease has been caused mostly by rapid slowdown of internal agriculture conversions between pasture and arable land, which were the main change drivers during the previous period.

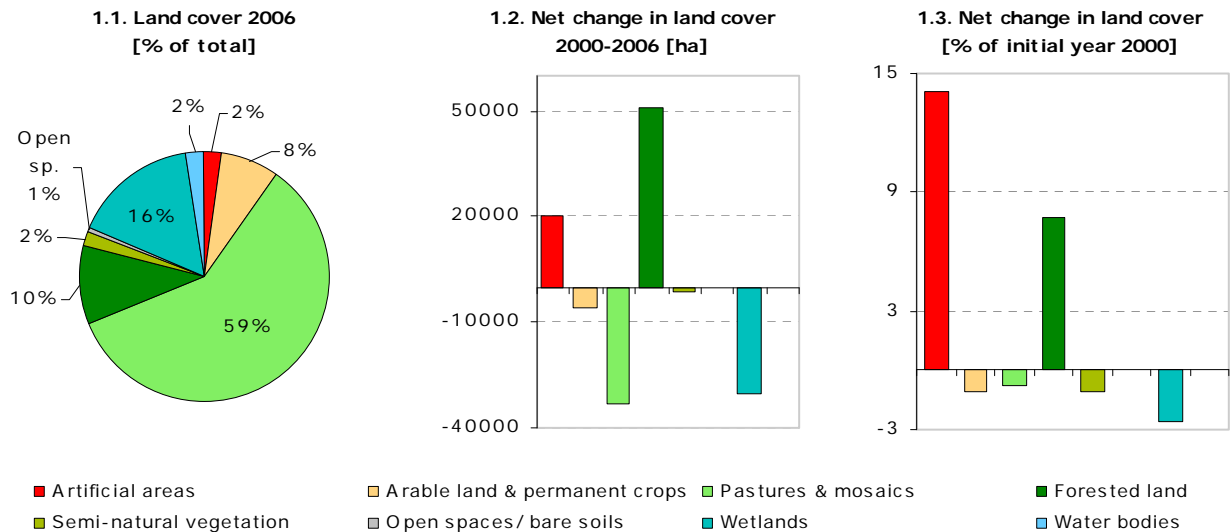
The most significant flow of land cover development in Ireland is the artificial sprawl, although slightly decreased compared to the previous period. With artificial land take rate of 2.4% per year, Ireland experienced for another decade one of the highest artificial increase rates among the European countries. Concerning the total change area, also forest creation and management together with withdrawal of farming have significant share of the total land cover exchange in Ireland.

Beside artificial surfaces, only forested land has positive balance of net change, while all other land cover types have negative net change balance with more or less significant consumption of the initial area.

Spatially, changes of forested land and withdrawal of farming are distributed over almost whole country. Artificial land take is concentrated mostly into surroundings of capital city Dublin. However, there also occurs significant amount of mainly residential sprawl scattered uniformly over Irish landscape. Some linear patterns in western and central part of Ireland indicate highway 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 France: 6



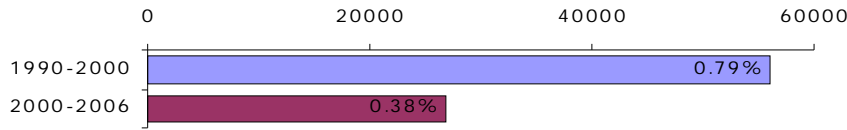
Summary balance table 2000-2006

	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
Land cover 2000	1425	5412	41861	6619	1454	457	11768	1588	70584
Consumption of initial LC	38	66	349	841	15	0	301	0	1611
Formation of new LC	239	7	15	1350	0	0	0	0	1611
Net Formation of LC	200	-59	-333	509	-15	0	-301	0	0
Net formation as % of initial year	14.1	-1.1	-0.8	7.7	-1.1	0.0	-2.6	0.0	
Total turnover of LC	277	72	364	2192	15	0	301	0	3222
Total turnover as % of initial year	19.4	1.3	0.9	33.1	1.1	0.0	2.6	0.0	4.6
Land cover 2006	1626	5353	41527	7128	1438	457	11466	1588	70584

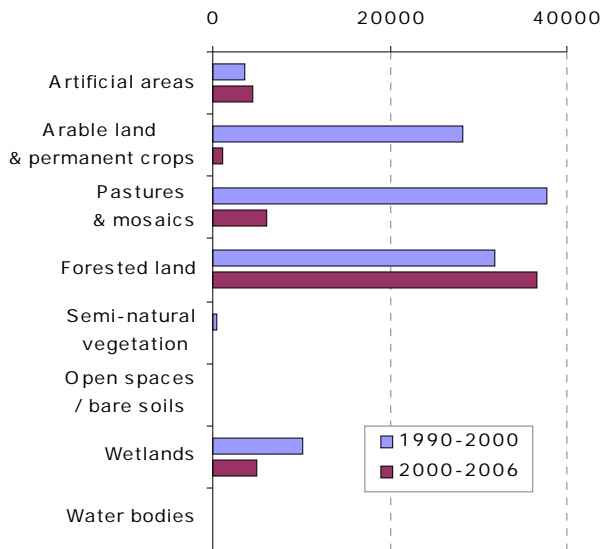
Ireland

Land cover trends comparison 1990-2000 vs. 2000-2006

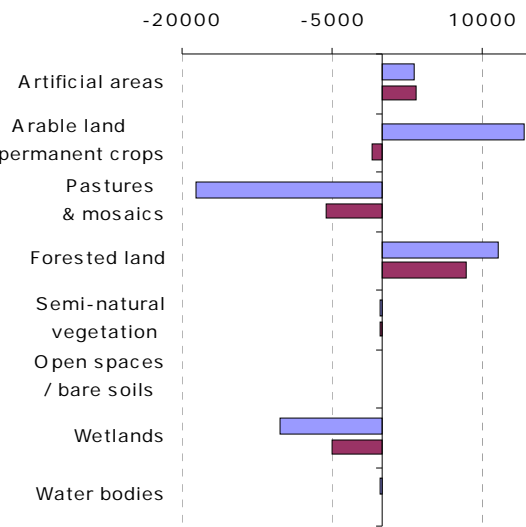
2.4. Annual land cover change
[ha/year, % of total area]



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

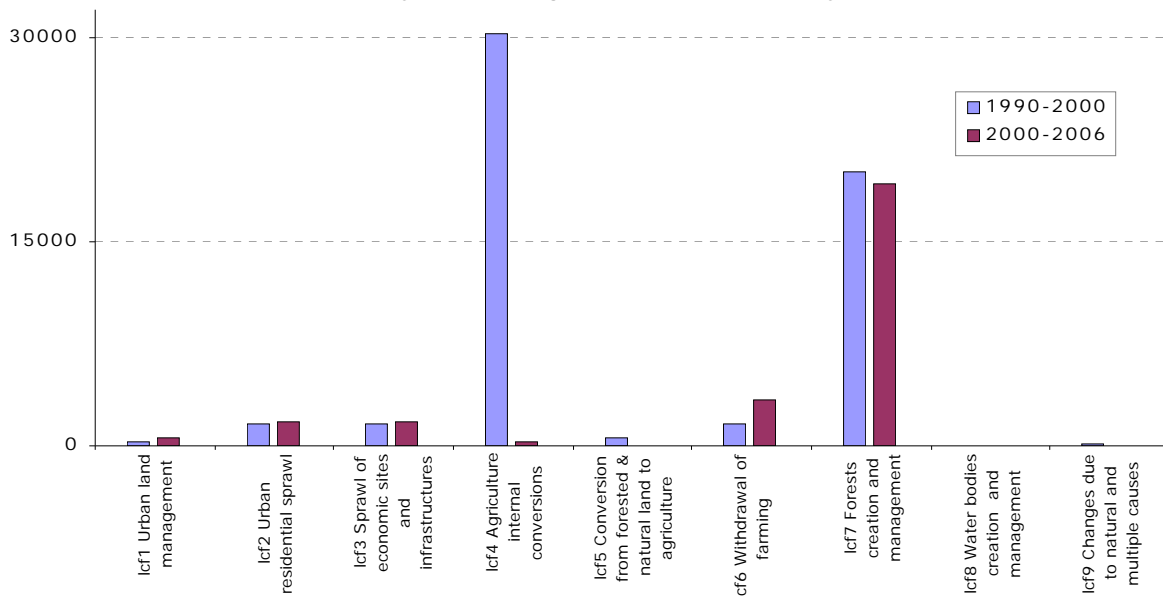


2.6. Net annual change of LC types [ha/year]

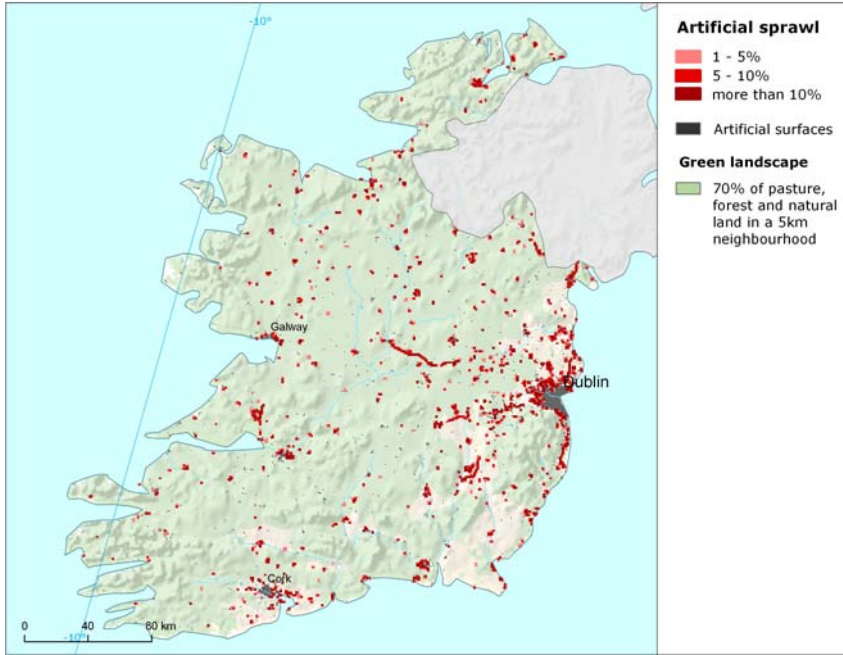


Summary trend figures		
	1990-2000	2000-2006
Annual land cover change [ha/year]	56110	26850
Annual land cover change as % of initial year	0.79%	0.38%
Land uptake by artificial development as mean annual change [ha/year]	3203	3427
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	3119	3281
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	-1021	-3310
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	15148	73
Forest & other woodland net formation as mean annual change [ha/year]	11666	8480
Dry semi-natural land cover net formation as mean annual change [ha/year]	-180	-257
Wetlands & water bodies net formation as mean annual change [ha/year]	-10303	-5022

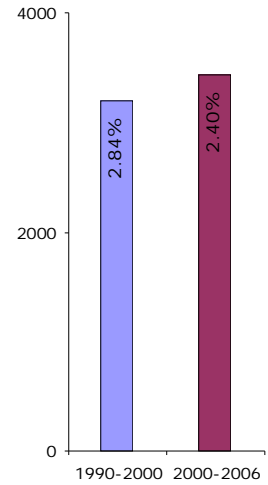
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



Artificial areas



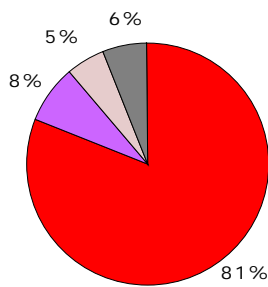
3.8. Artificial land take [ha/year, % of initial year]



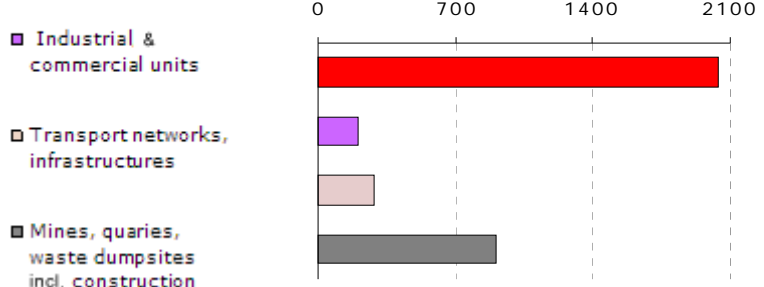
Discontinuous urban fabric sprawl remains very high

The artificial sprawl in Ireland continued with similarly high intensity as in previous with slightly increased area. Even the percentual rate slightly decreased, land take in Ireland is one of the highest among European countries. Also, the structure of artificial land take is similar to the previous period. The main driver of land take remains diffuse residential sprawl with 50% share of the total artificial land uptake. The other significant contributors of artificial land take are construction (17%), sprawl of sport and leisure facilities (9%), mineral extraction sites (9%), transportation networks (8%) and industrial/commercial units (6%). Dominantly agricultural land (96%) with predominant share of pastures and mosaics (71%) has been up-taken. Beside the sprawl of artificial areas over non-artificial land, recycling and infilling of already developed urban land (represented mainly by conversion of construction sites into discontinuous urban fabric and transportation networks) occurs with increased intensity compared to the previous period.

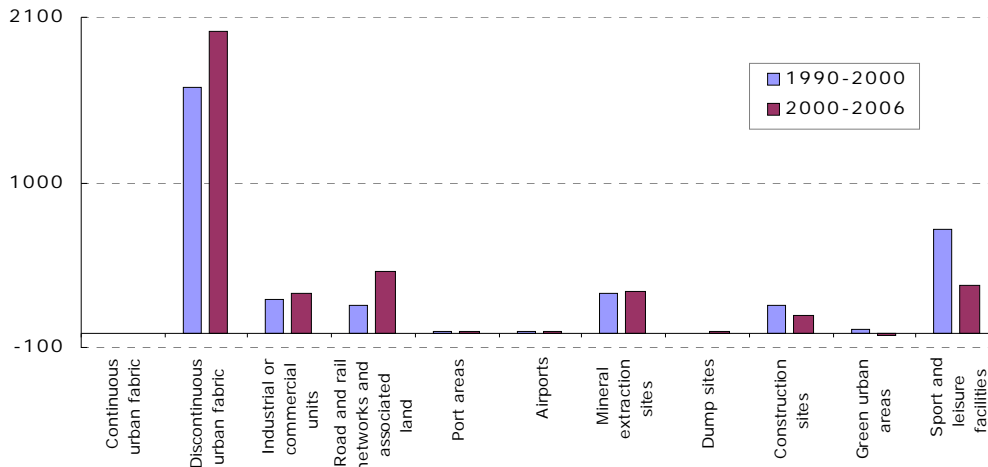
3.9. Artificial surfaces 2006 [% of total area]



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

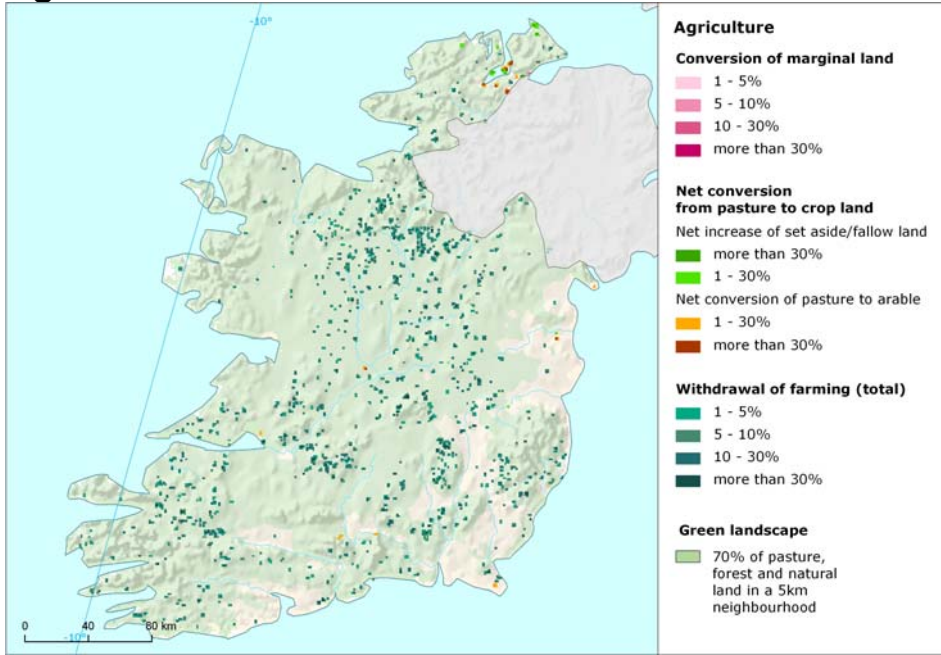


3.11. Mean annual artificial change by class [ha/year]



Ireland

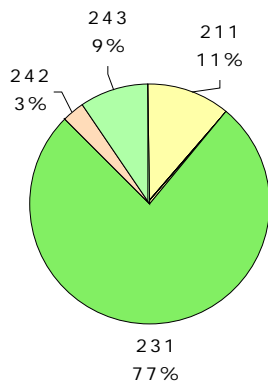
Agriculture



Rapid slowdown of internal agriculture conversions

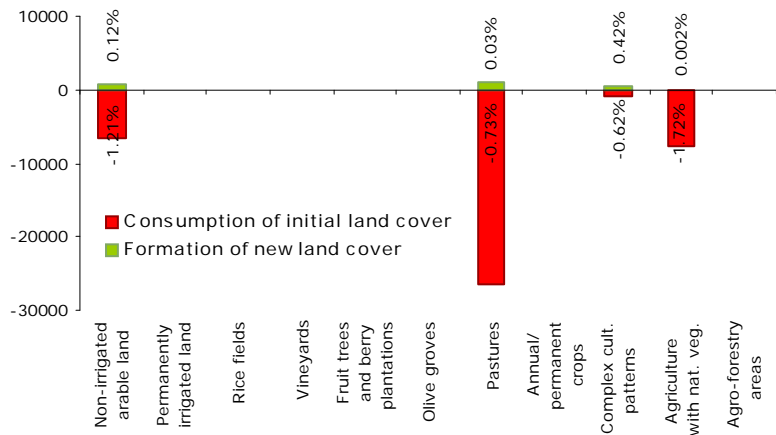
Agricultural land in Ireland is characteristic by predominant share of pastures (more than ¼ of all agricultural areas). The rest of agricultural areas consist of arable land and agricultural land with significant amount of natural vegetation. In contrast to the period 1990-2000, when arable land has significantly positive balance of net change, in this period, balance of both pasture and arable land is negative, with prevailing consumption of all agricultural classes. Intensive internal agricultural changes (characterized by conversion from pasture to arable land), which were the main drivers of land cover change in Ireland during the previous period, have been rapidly slowed down and these conversions almost disappeared in the Irish agricultural landscape. On the contrary, external consumption of agricultural land driven by withdrawal of farming with creation of transitional woodland, together with sprawls of residential areas, economic sites and infrastructures, accelerated compared to the previous period. Areas with withdrawal of farming with transitional woodland creation are densely scattered over almost the whole territory of Ireland, with special focus on the central part of the island.

4.12. Agricultural areas 2006 [% of total area]

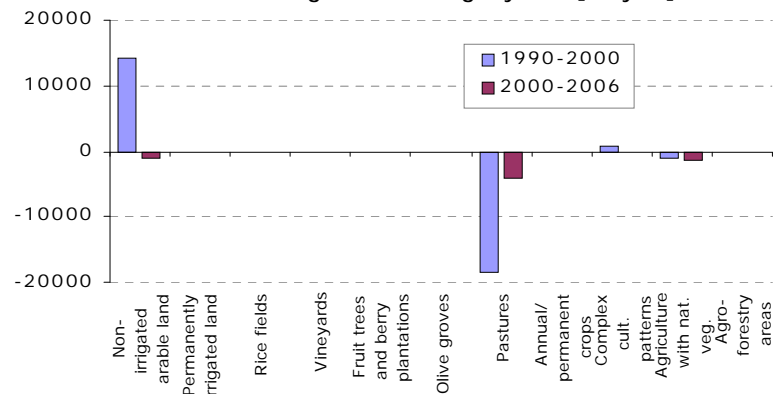


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas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

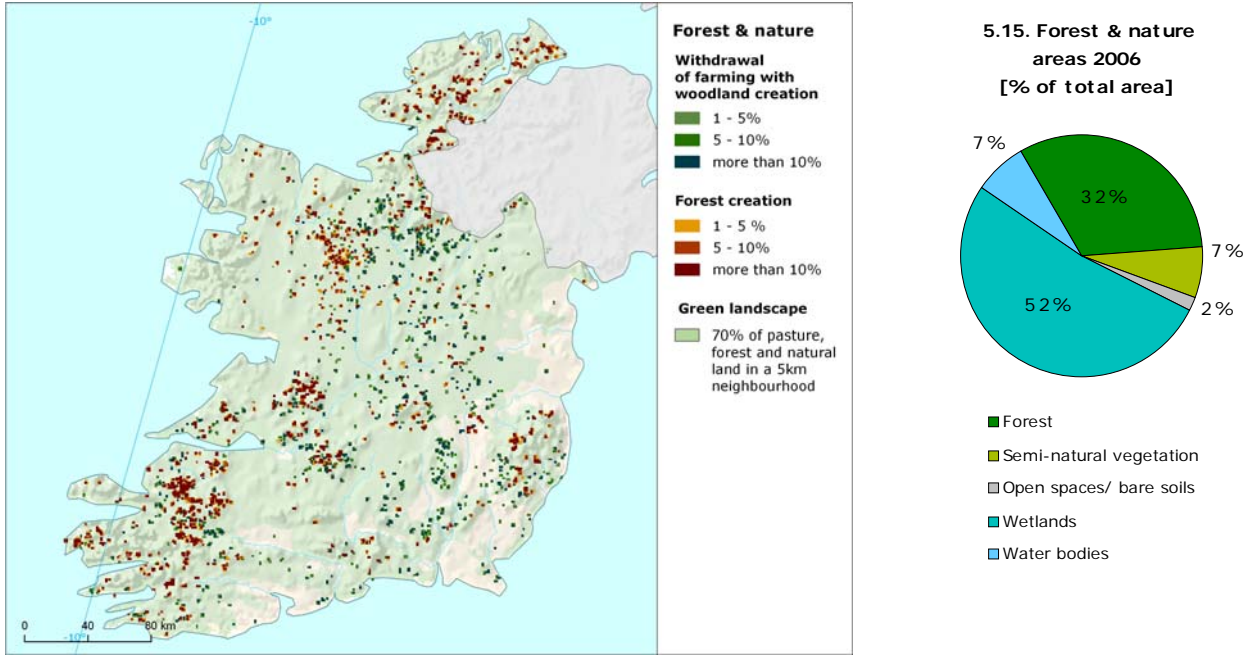
4.13. Development of agricultural areas 2000-2006 – detailed balance [ha]



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



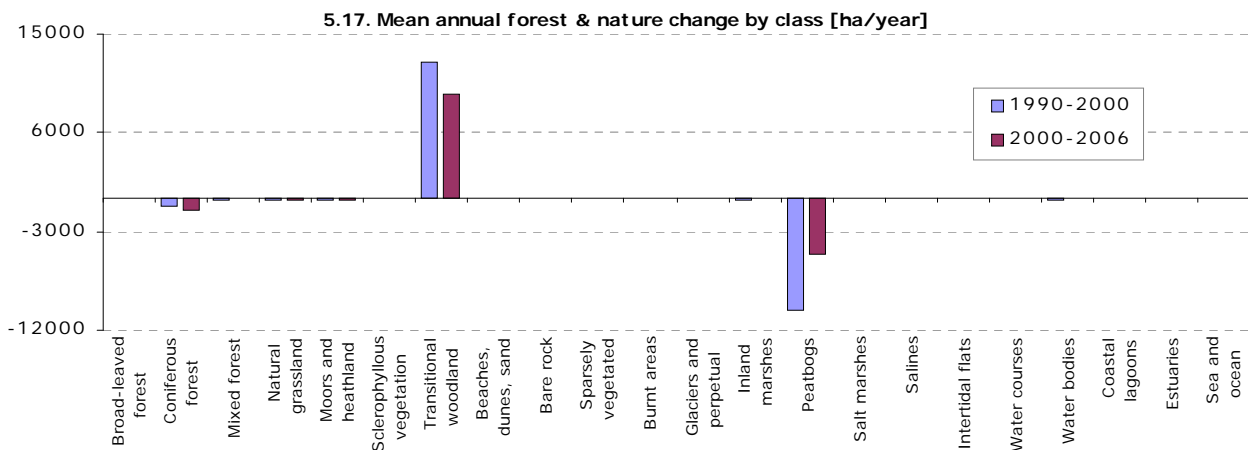
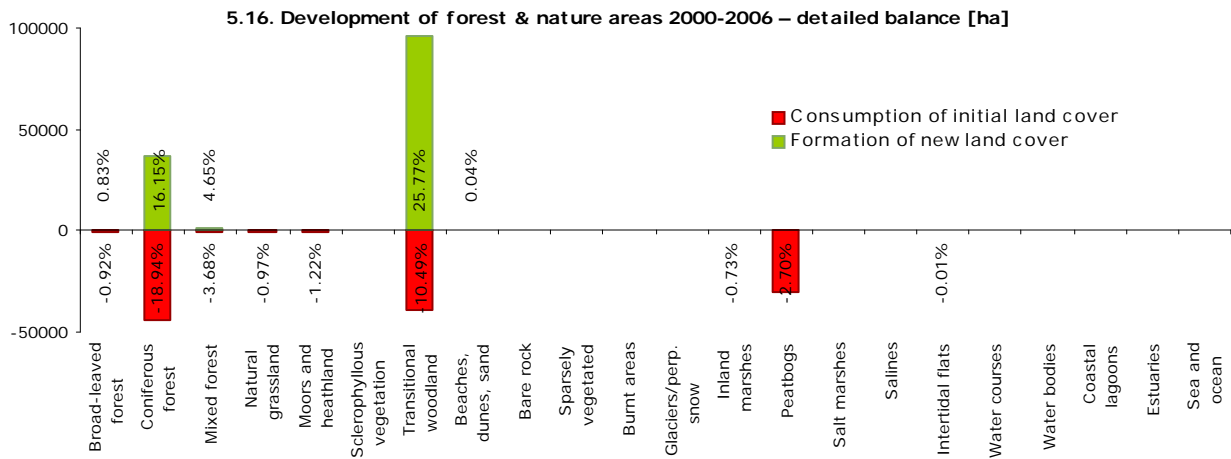
Forest & nature



Transitional woodland/shrub creation over natural and agro-natural areas

More than half of Irish natural land is composed of wetlands (mainly peatbogs). The rest is covered by transitional woodland/shrub, coniferous forests, natural grasslands and moors and heathlands.

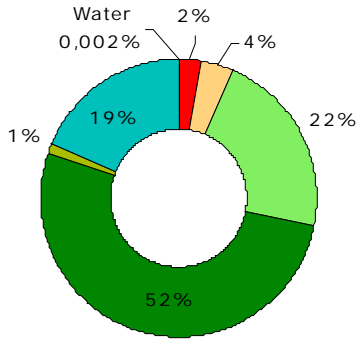
Beside internal conversions between forest and transitional woodland, development of natural land cover in Ireland has been driven by transitional woodland/shrub creation over non-forested natural and agro-natural areas. Compared to the previous period, the intensity of transitional woodland/shrub creation over natural land represented mostly by peatbogs (and to a lesser extent also by natural grasslands and moors and heathlands) significantly decreased. In contrast, withdrawal of farming with transitional woodland creation over pastures and agro-natural areas accelerated more than twice, compared to the period 1990-2000.



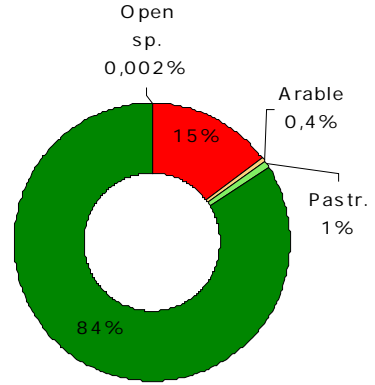
Annex: Land cover flows and trends

Land cover flows 2000-2006

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

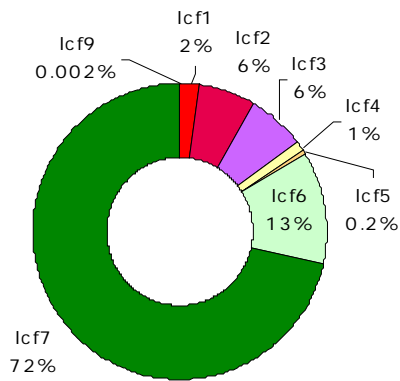


6.19. Formation of land cover 2000-2006 [% of total change area]



- 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]

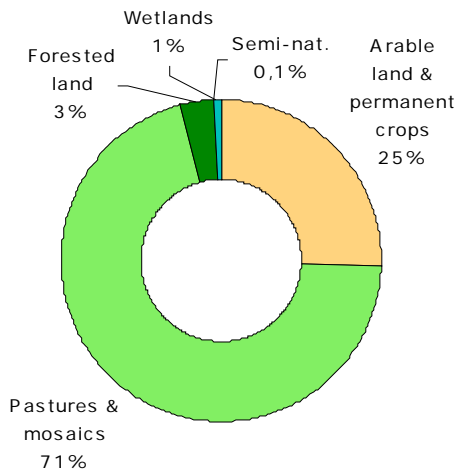


- Icf1 Urban land management
- Icf2 Urban residential sprawl
- Icf3 Sprawl of economic sites and infrastructures
- Icf4 Agriculture internal conversions
- Icf5 Conversion from forested & natural land to agriculture
- Icf6 Withdrawal of farming
- Icf7 Forests creation and management
- Icf8 Water bodies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

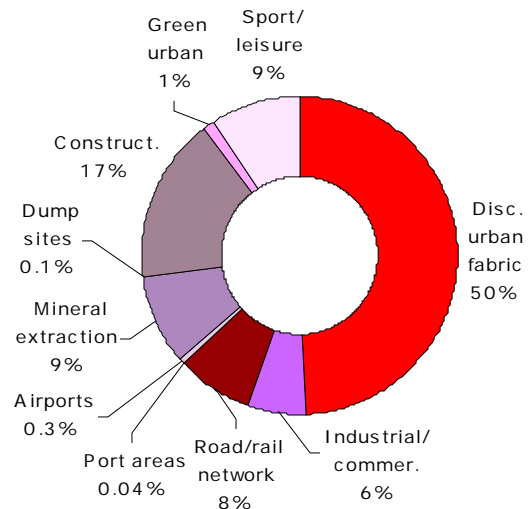
Ireland

Artificial areas

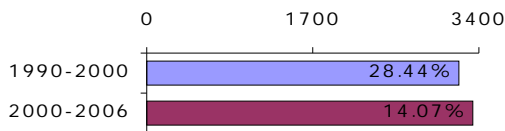
7.21. Consumption by artificial land take 2000-2006 [% of total]



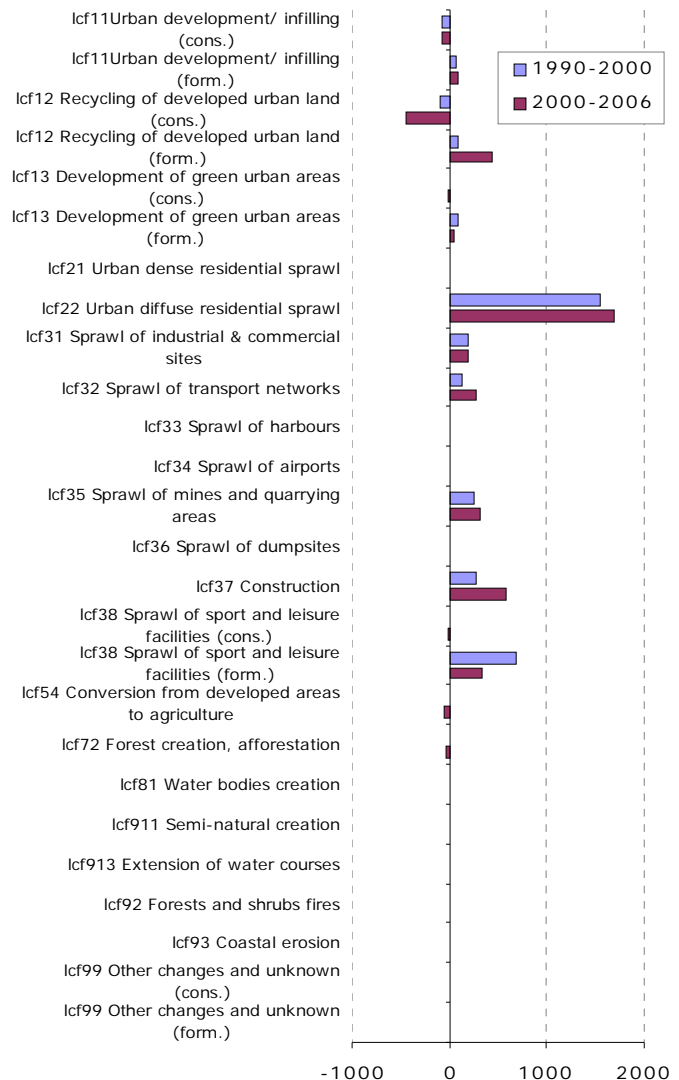
7.22. Formation by artificial land take 2000-2006 [% of total]



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



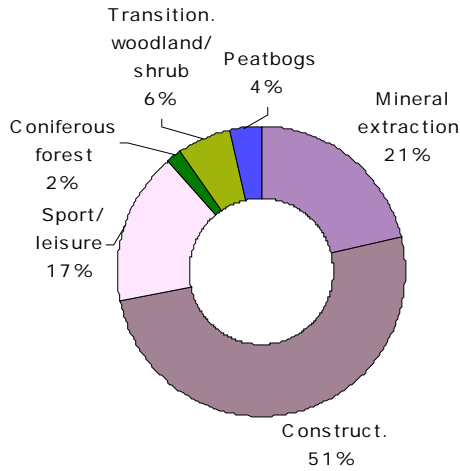
7.24. Artificial development by change drivers (LC FLOWS) [ha/year]



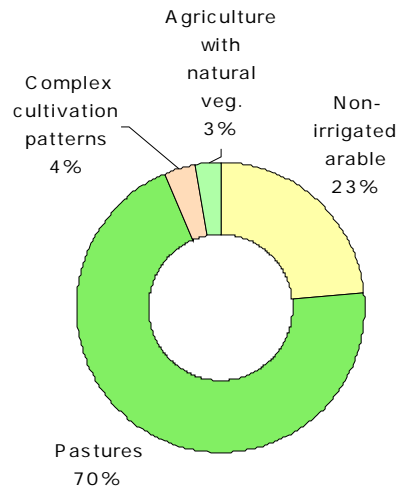
Ireland

Agriculture

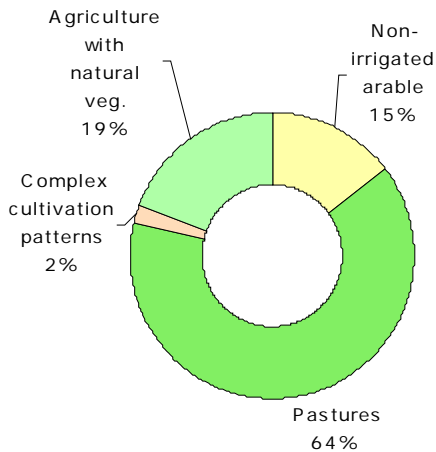
8.25. LC consumed by agriculture 2000-2006 [% of total]



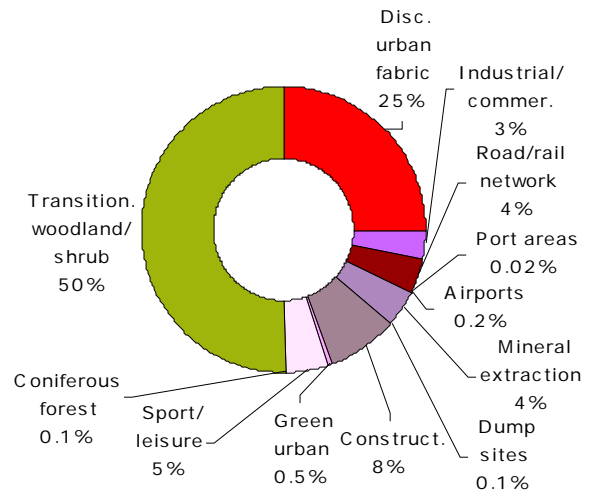
8.26. Formation of agricultural land from non-agriculture 2000-2006 [% of total]



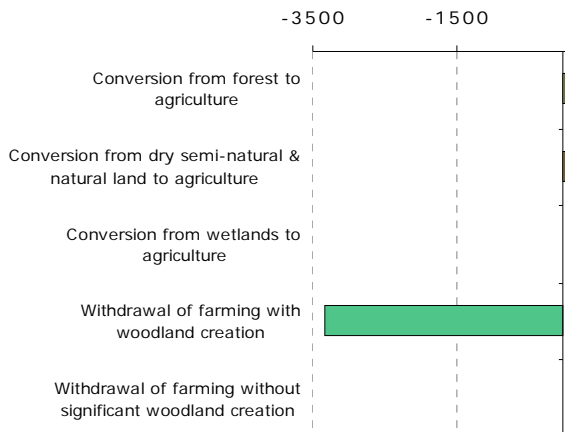
8.27. Consumption of agricultural land by non-agriculture 2000-2006 [% of total]



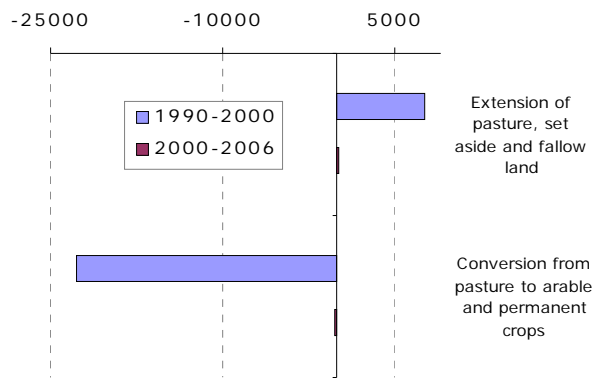
8.28. Formation of non-agricultural land from agriculture 2000-2006 [% of total]



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

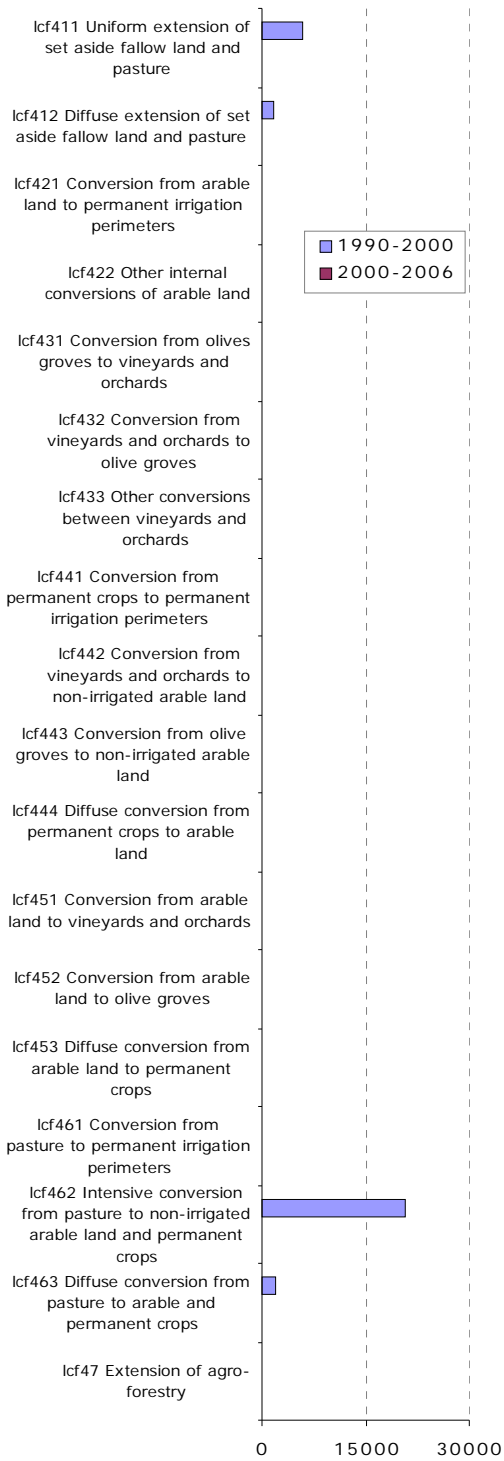


8.30. Mean annual conversion between arable land and pasture [ha/year]

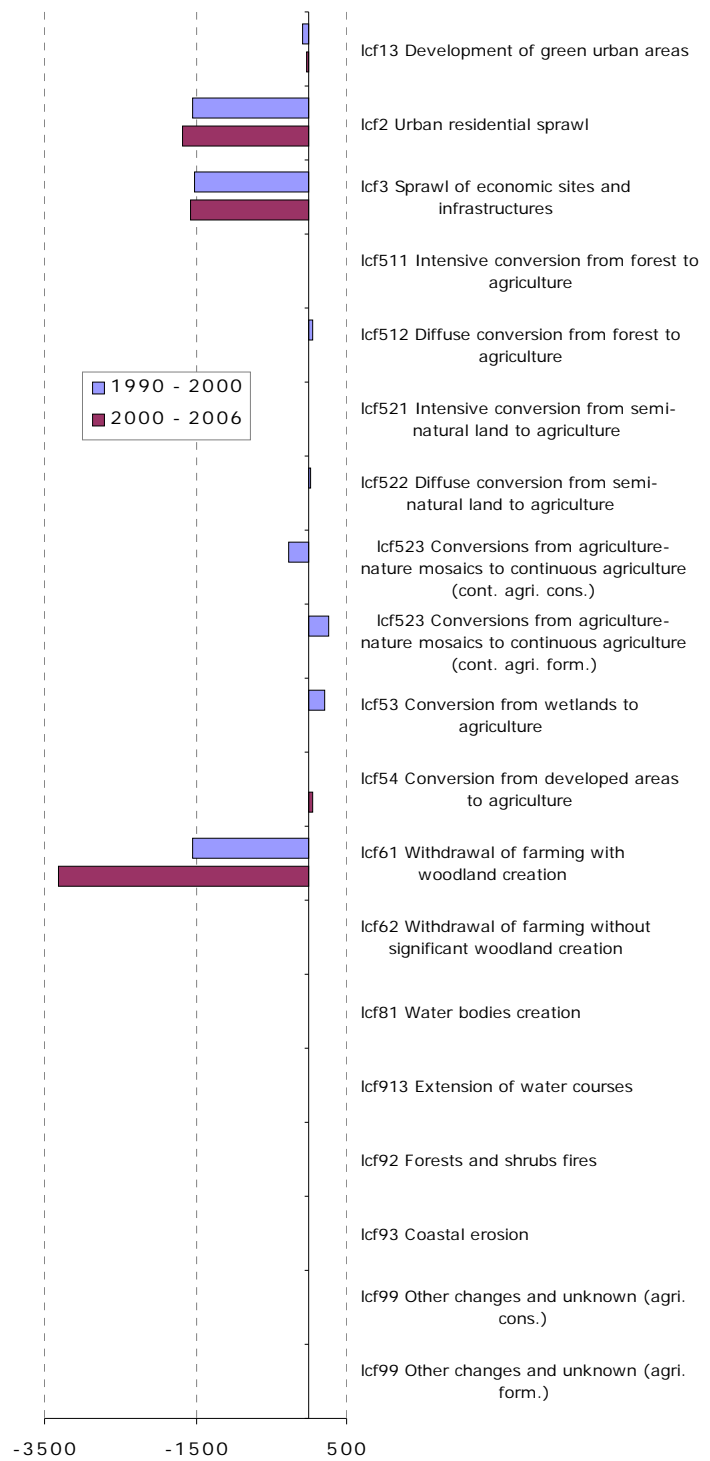


Ireland

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



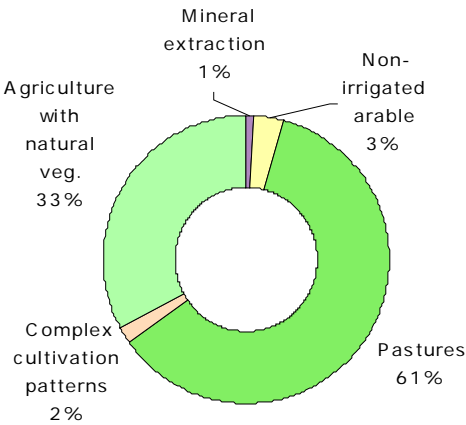
9.32. Mean annual conversions between agriculture and other LC types [ha/year]



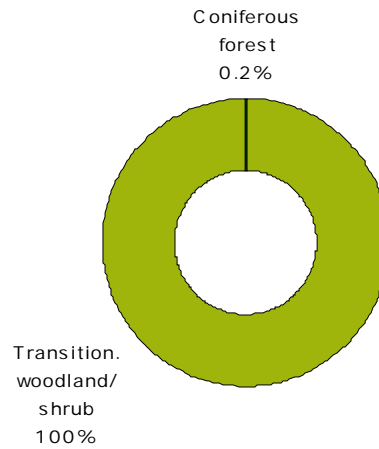
Ireland

Forest & nature

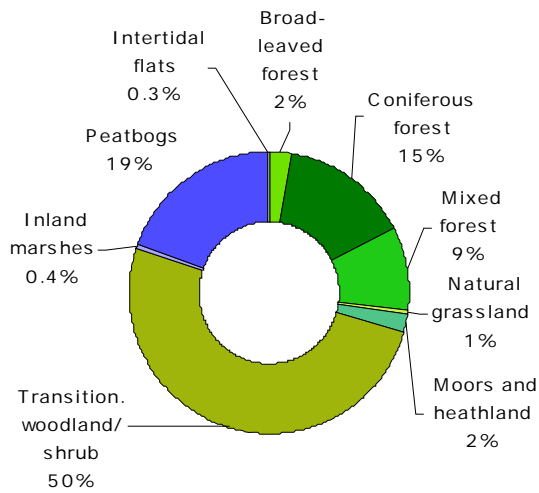
10.33. LC consumed by forest & nature 2000-2006 [% of total]



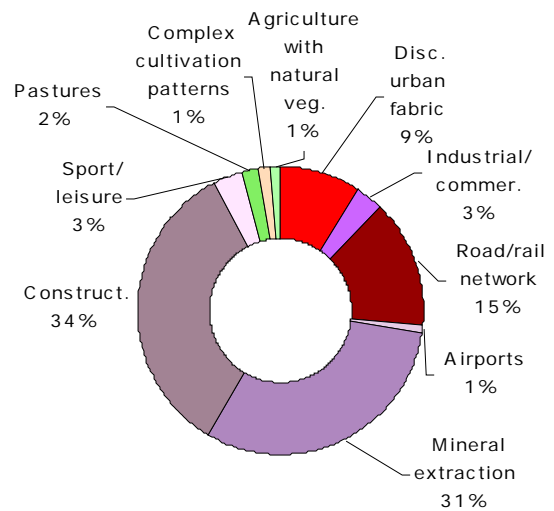
10.34. Formation of forest & nature land from non-forest /nature 2000-2006 [% of total]



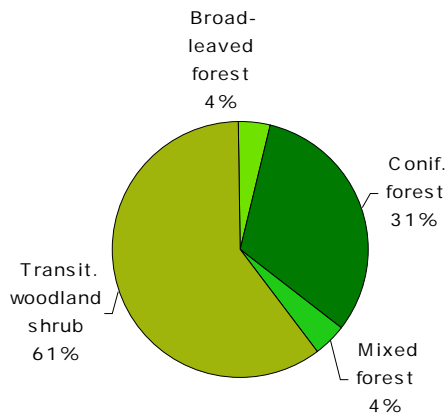
10.35. Consumption of forest & nature land by non-forest/nature 2000-2006 [% of total]



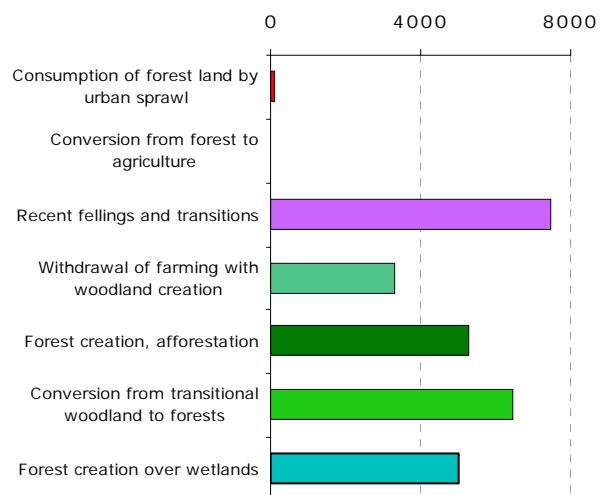
10.36. Formation of non-forest/nature land from forest & nature 2000-2006 [% of total]



10.37. Forested land 2006 [% of total area]

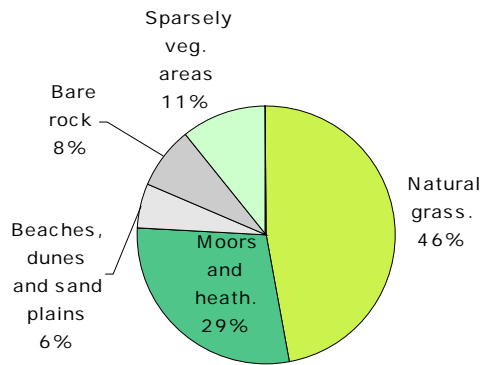


10.38. Main trends in woodland & forests consumption/formation 2000-2006 [ha/year]

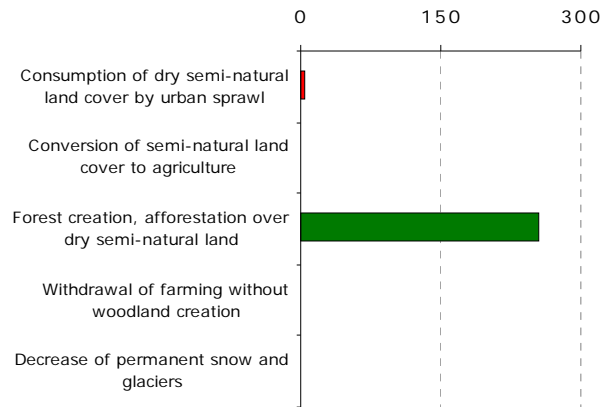


Ireland

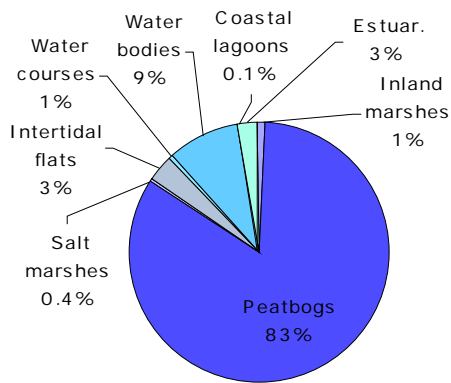
11.39. Dry semi-natural areas 2006
[% of total area]



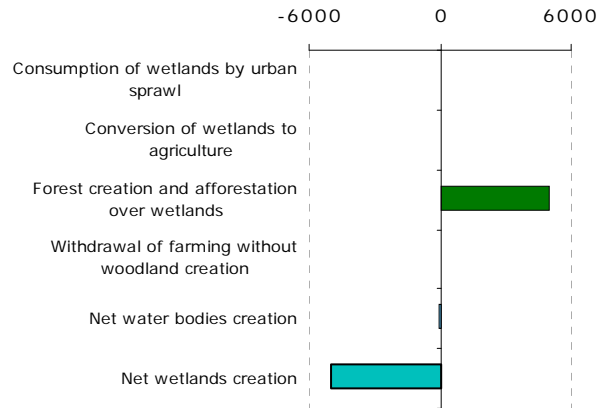
11.40. Main trends in dry semi-natural land consumption/formation 2000-2006 [ha/year]



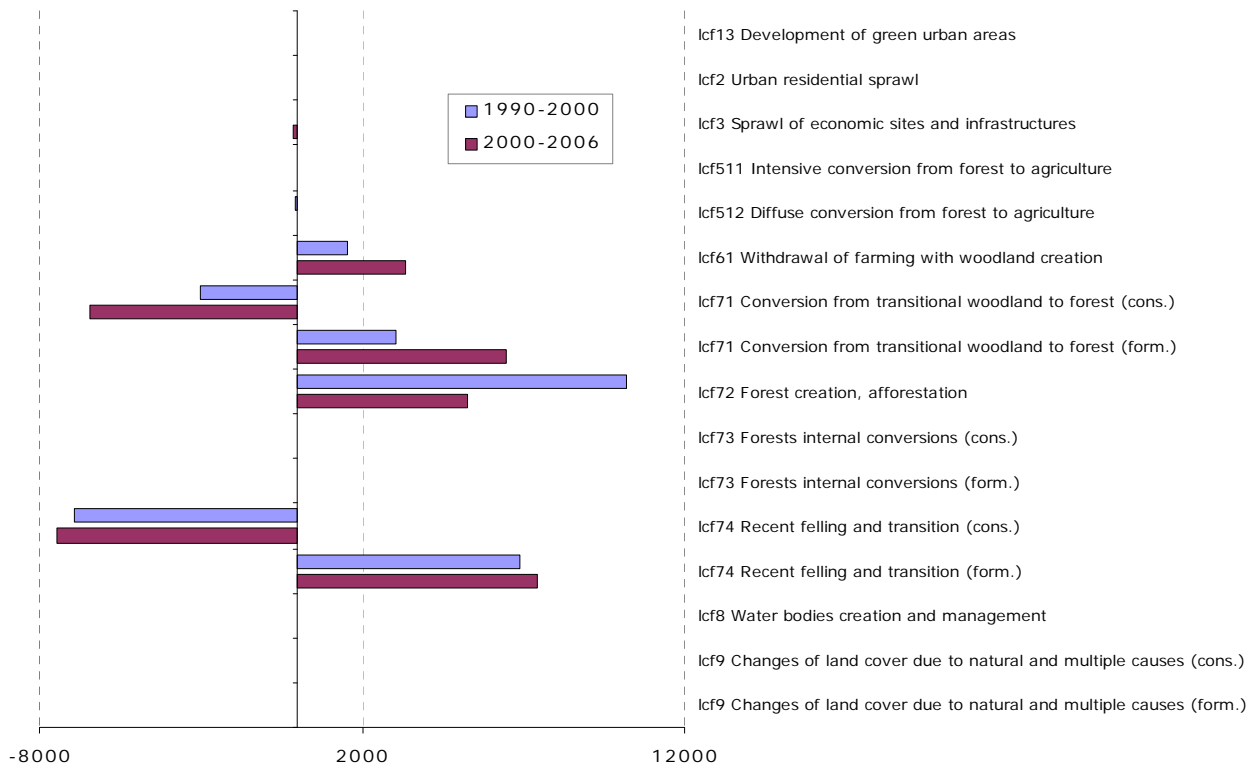
11.41. Wetlands & water 2006
[% of total area]



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

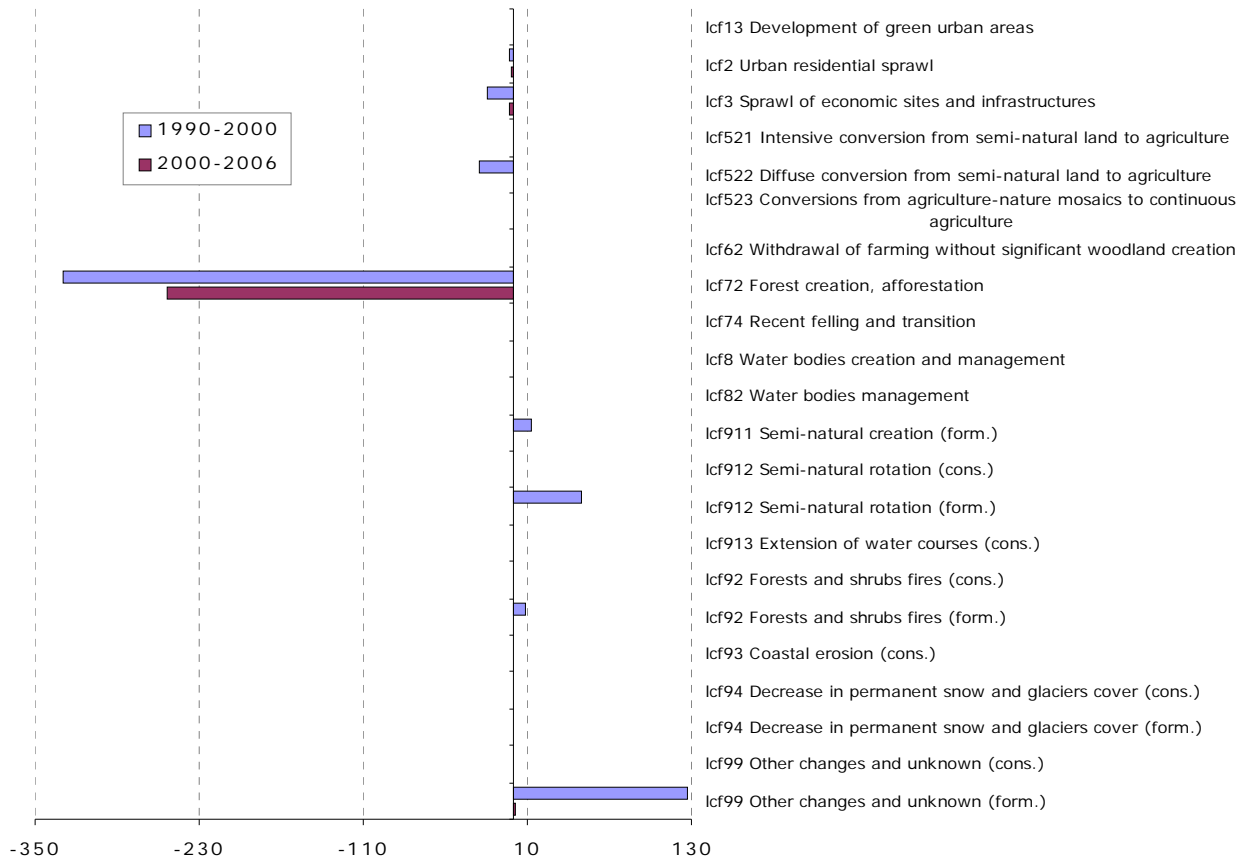


11.43. Mean annual conversions of forest & other woodland [ha/year]

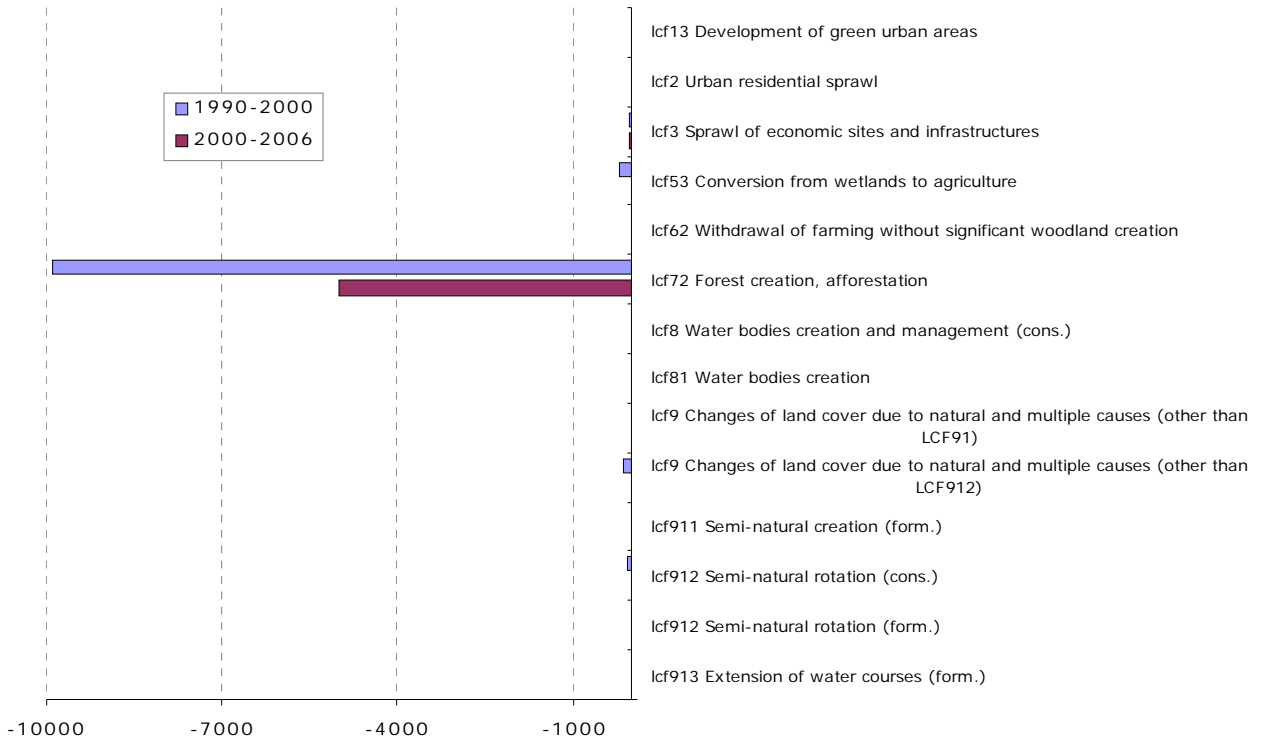


Ireland

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

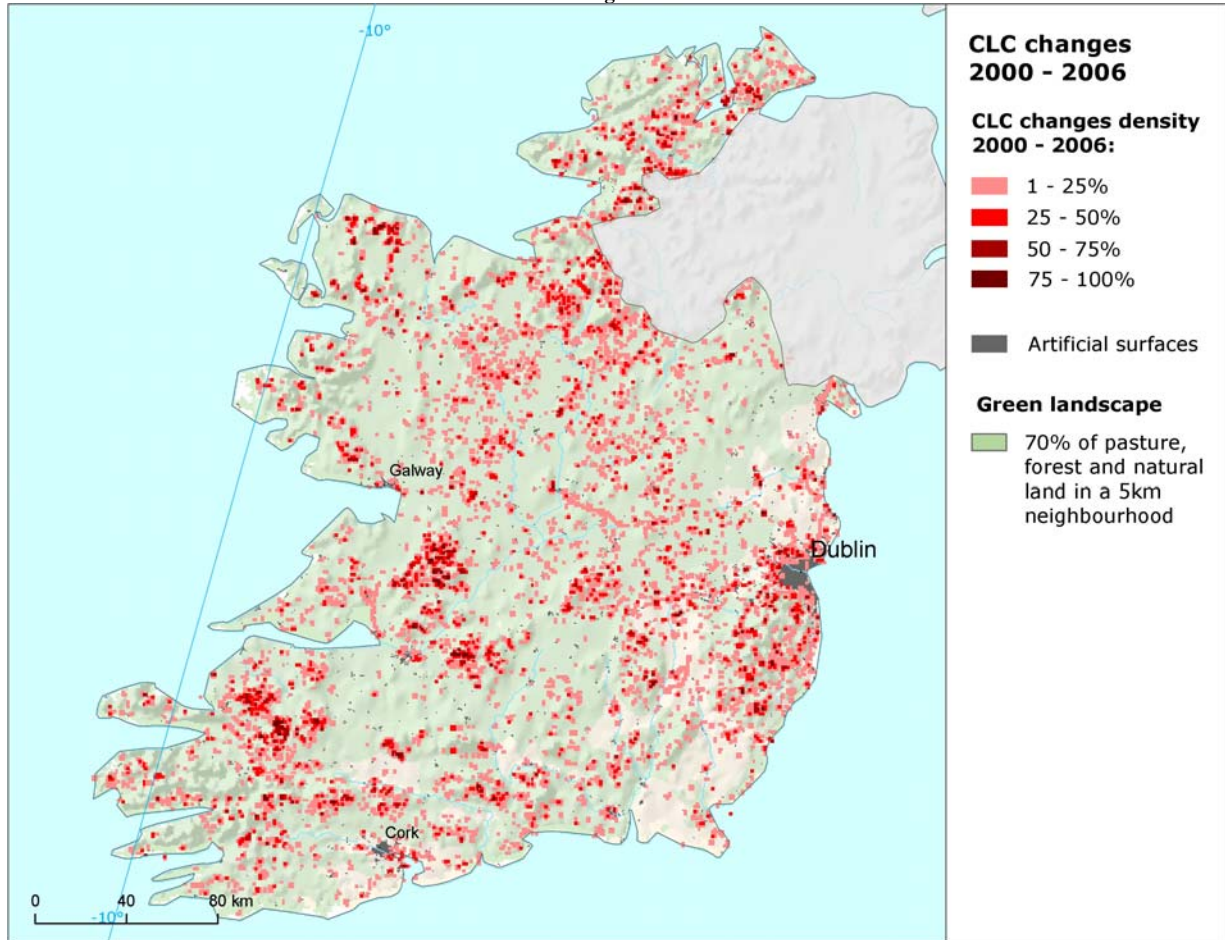


12.45. Mean annual conversions of wet lands and water LC [ha/year]

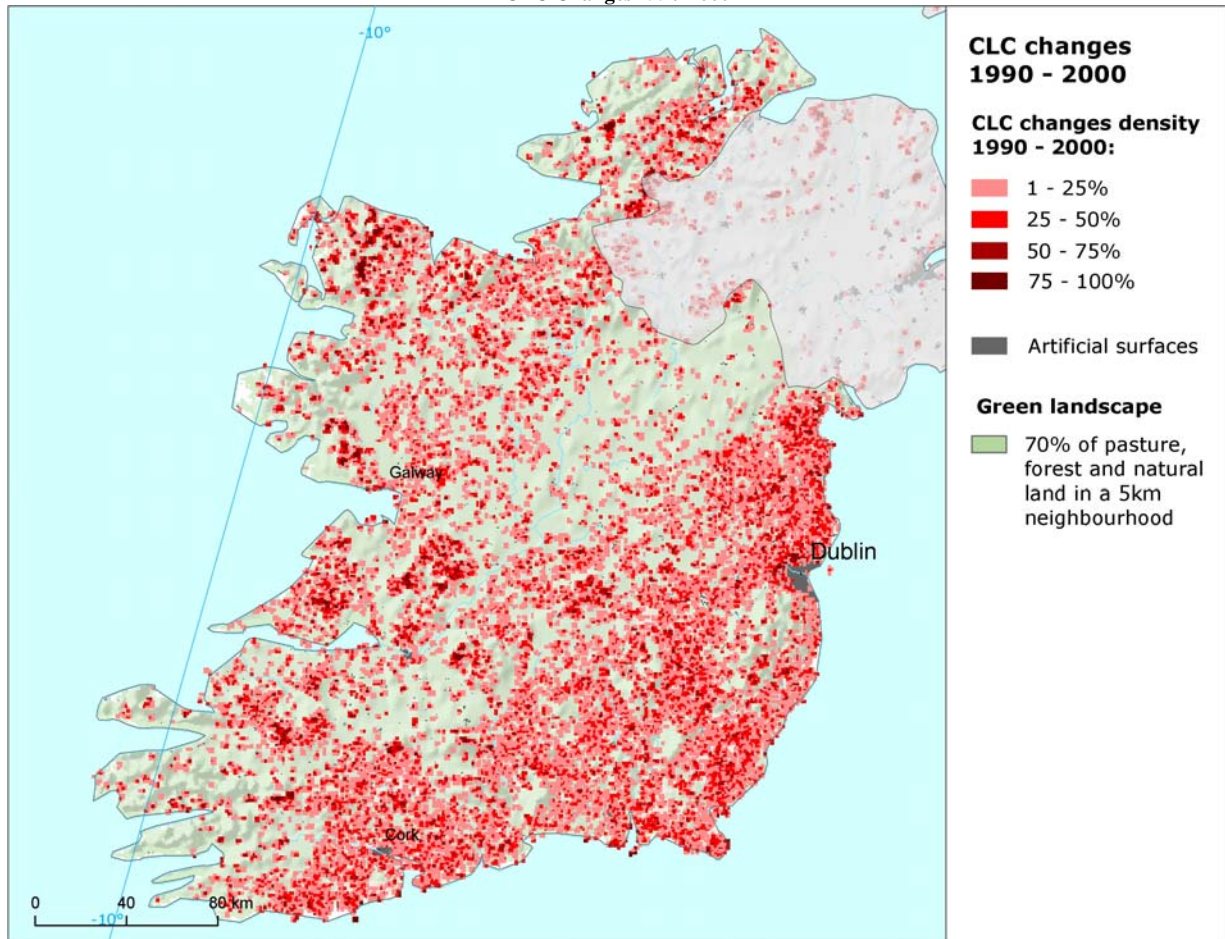


Ireland

CLC Changes 2000-2006

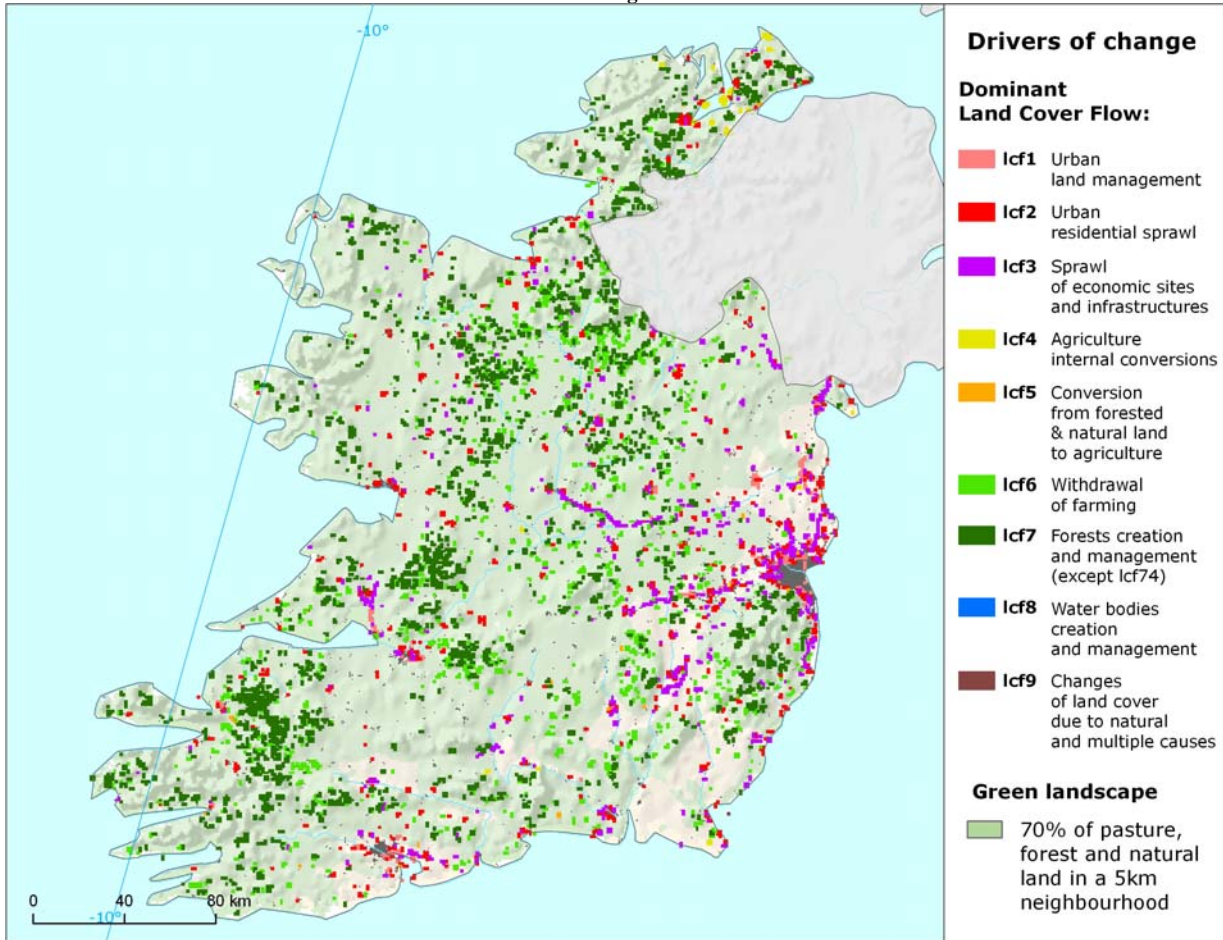


CLC Changes 1990-2000

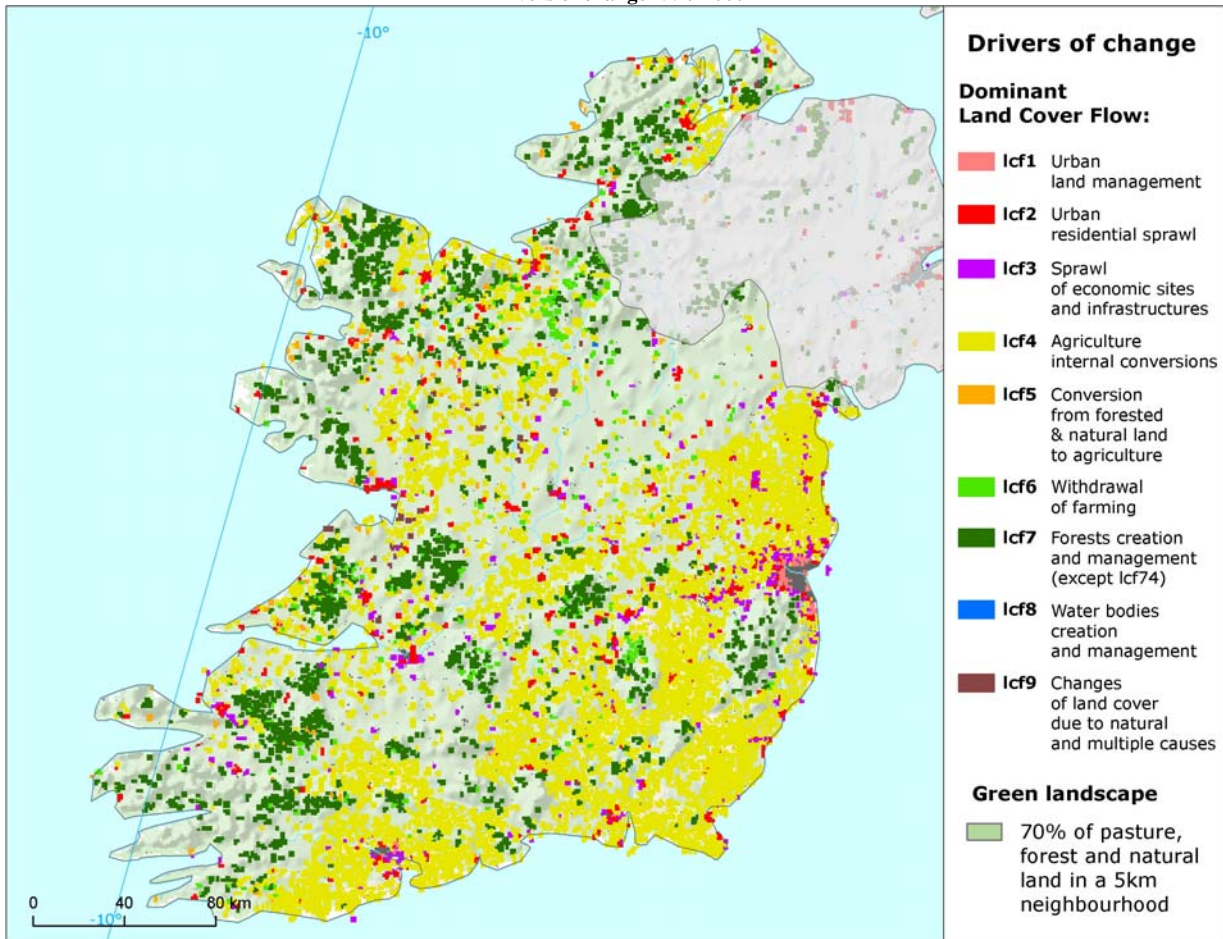


Ireland

Drivers of change 2000-2006

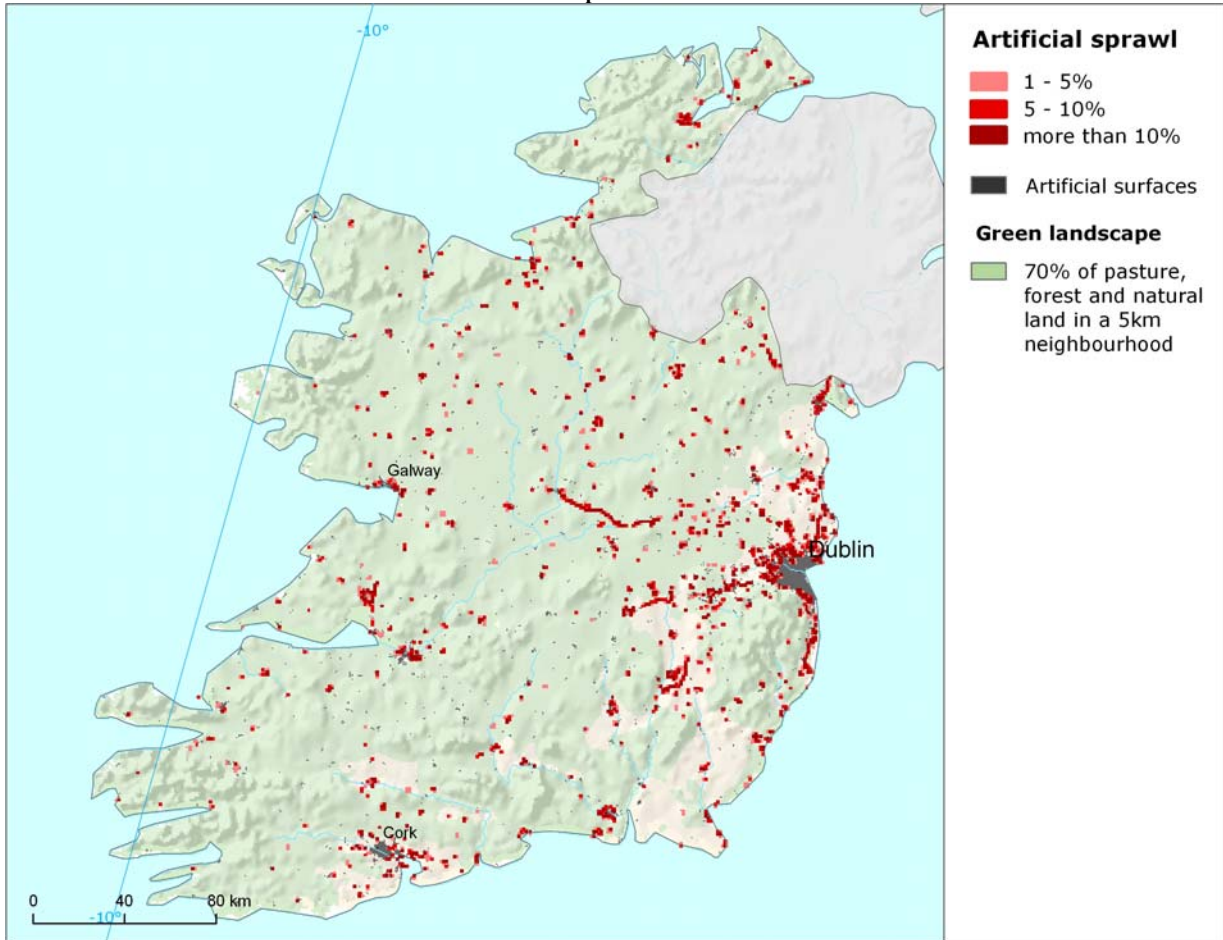


Drivers of change 1990-2000

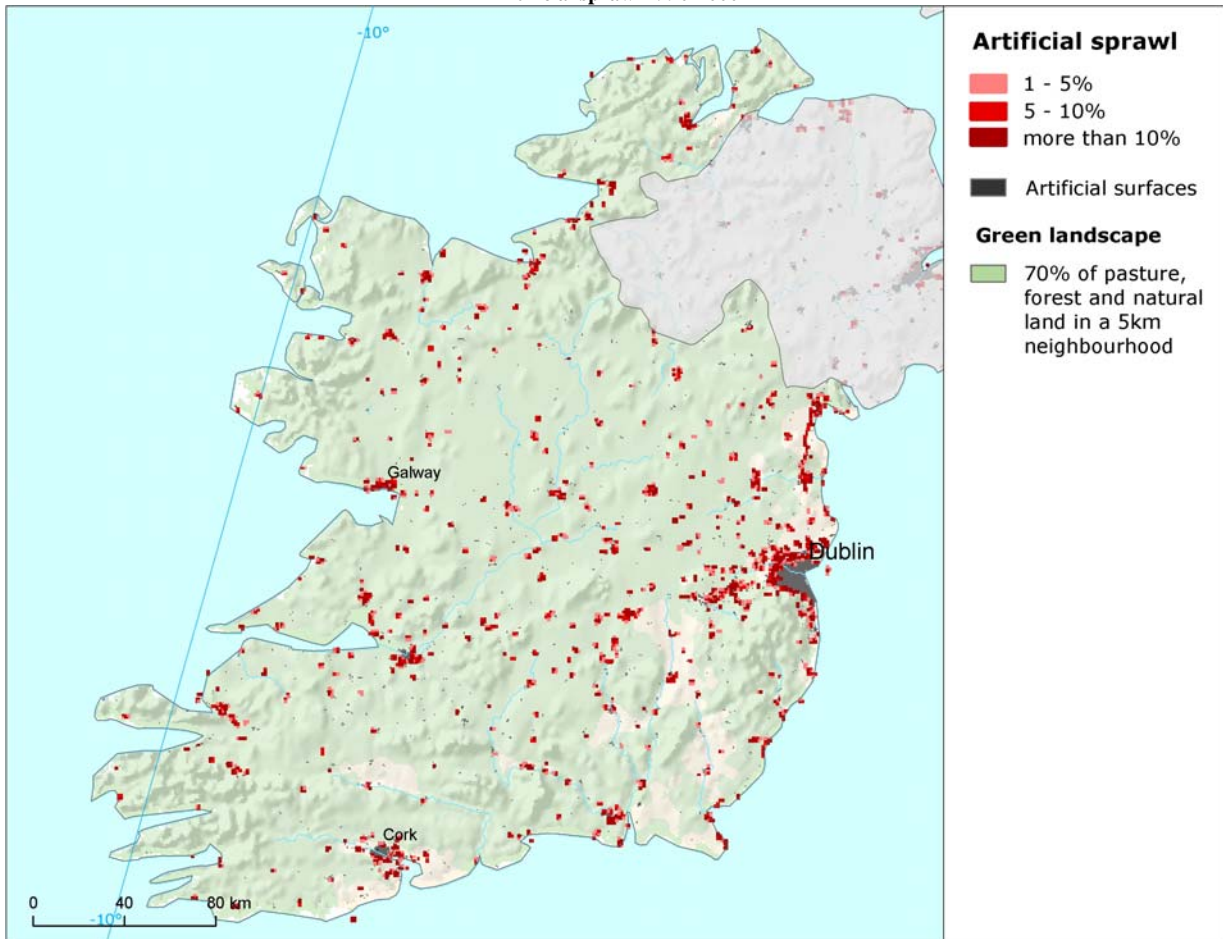


Ireland

Artificial sprawl 2000-2006

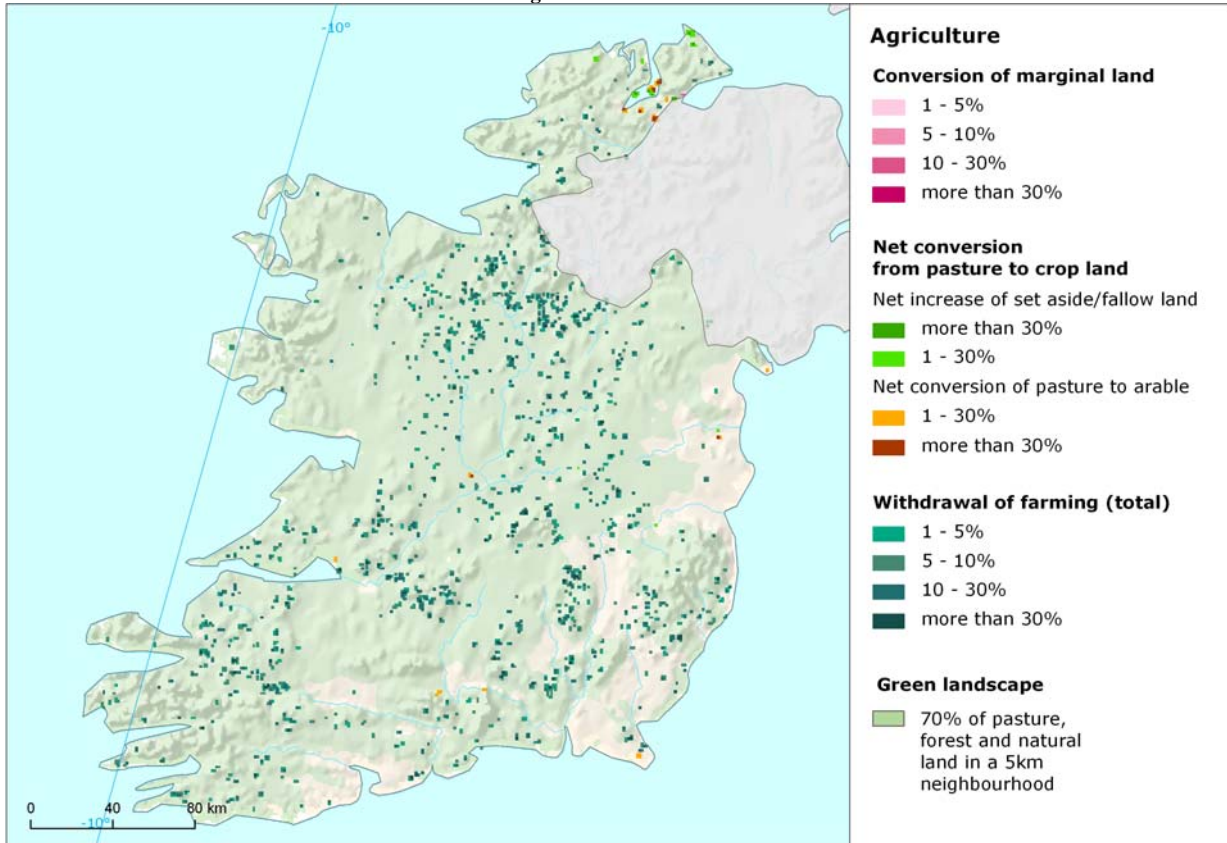


Artificial sprawl 1990-2000

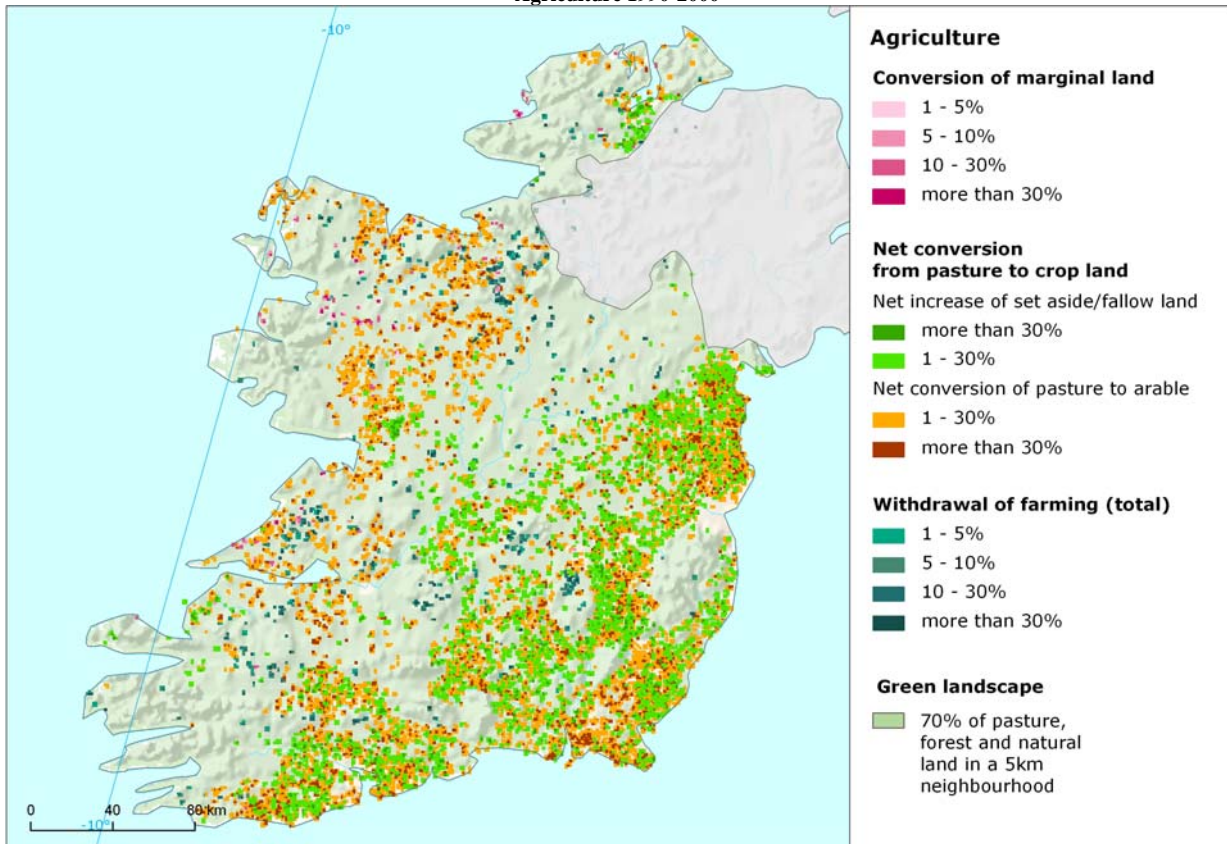


Ireland

Agriculture 2000-2006

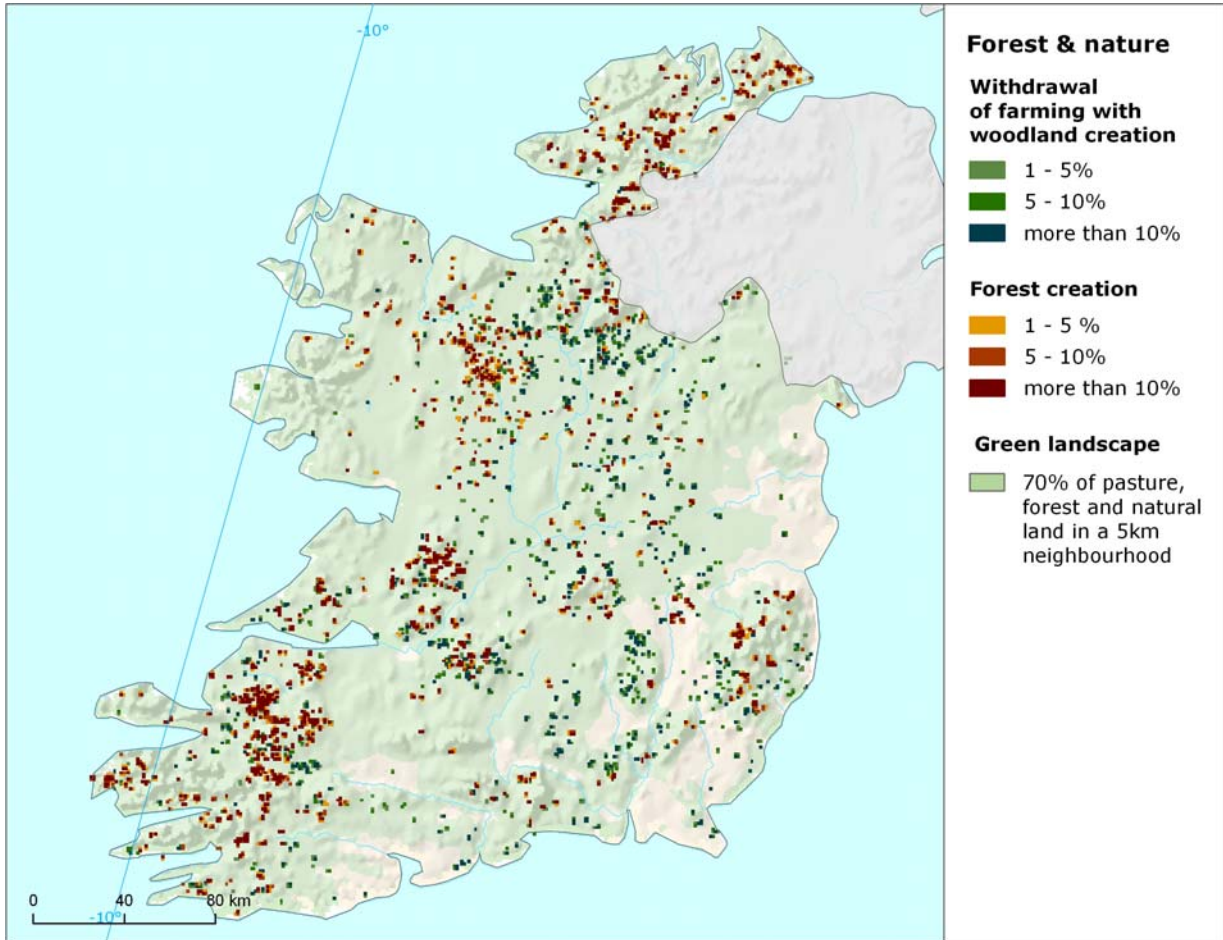


Agriculture 1990-2000



Ireland

Forest and nature 2000-2006



Forest and nature 1990-2000

