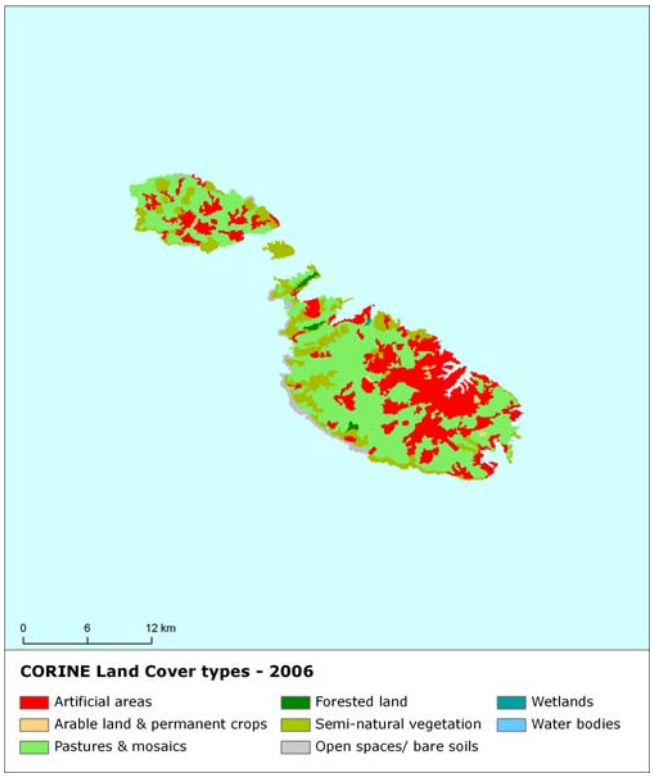
Malta

Land cover 2006

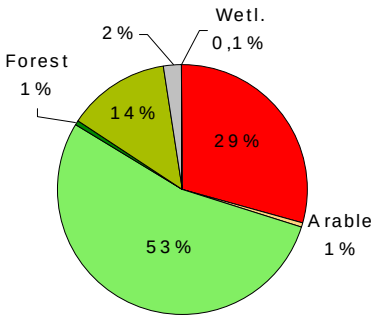
Overview of land cover & change 2000-2006

The Mediterranean landscape which covers Malta islands consists mainly of agricultural areas with natural vegetation and sclerophyllous vegetation areas, with high share of artificial land cover (29%) on total country area.
Comparing to the previous period 1990-2000 in which some artificial development was detected, the landscape change during 2000-2006 is negligible. Only one polygon changed during 2000-2006, covering 7 hectares. It indicates either high stability of landscape in Malta or the changes in such a small country occurs at a scale below change detection threshold of the CLC data. The only change mapped for period 2000-2006 was the formation of dump site over sclerophyllous vegetation area.

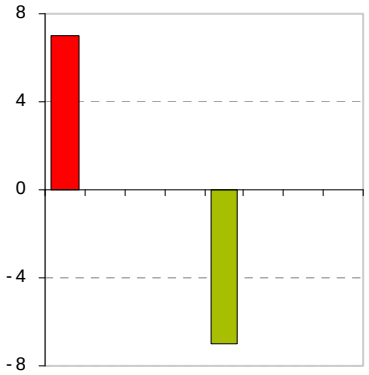


Note: The results presented here are based on a change analysis of 44 land cover types mapped consistently on a 1:100.000 scale across Europe over almost two decades 1990-2006 - see Corine land cover (CLC) programme for details.
Number of years between CLC2000-CLC2006 data for Malta: 6

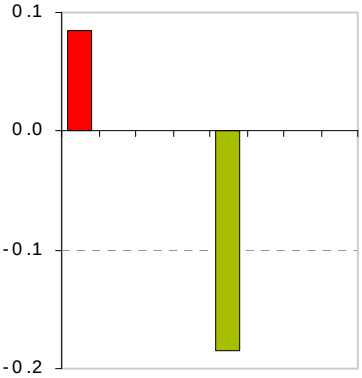
1.1. Land cover 2006 [% of total]



1.2. Net change in land cover 2000-2006 [ha]



1.3. Net change in land cover [% of initial year 2000]



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

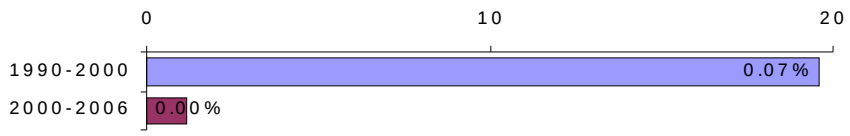
Summary balance table 2000-2006

	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	**82**	**2**	**149**	**2**	**38**	**6**	**0**	**0**	**278**
Consumption of initial LC	0	0	0	0	0	0	0	0	0
Formation of new LC	0	0	0	0	0	0	0	0	0
Net Formation of LC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net formation as % of initial year	*0.1*	*0.0*	*0.0*	*0.0*	*-0.2*	*0.0*	*0.0*	*#DIV/0!*	
Total turnover of LC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total turnover as % of initial year	*0.1*	*0.0*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*#DIV/0!*	*0.1*
Land cover 2006	**82**	**2**	**149**	**2**	**38**	**6**	**0**	**0**	**278**

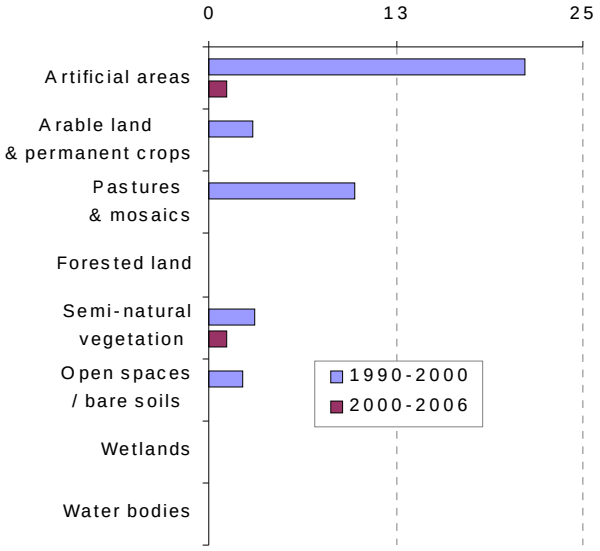
Malta

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

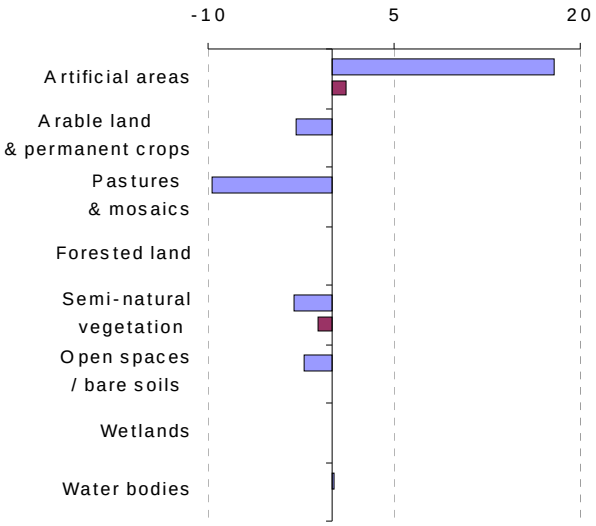
2.4. Annual land cover change [ha/year, % of total area]



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

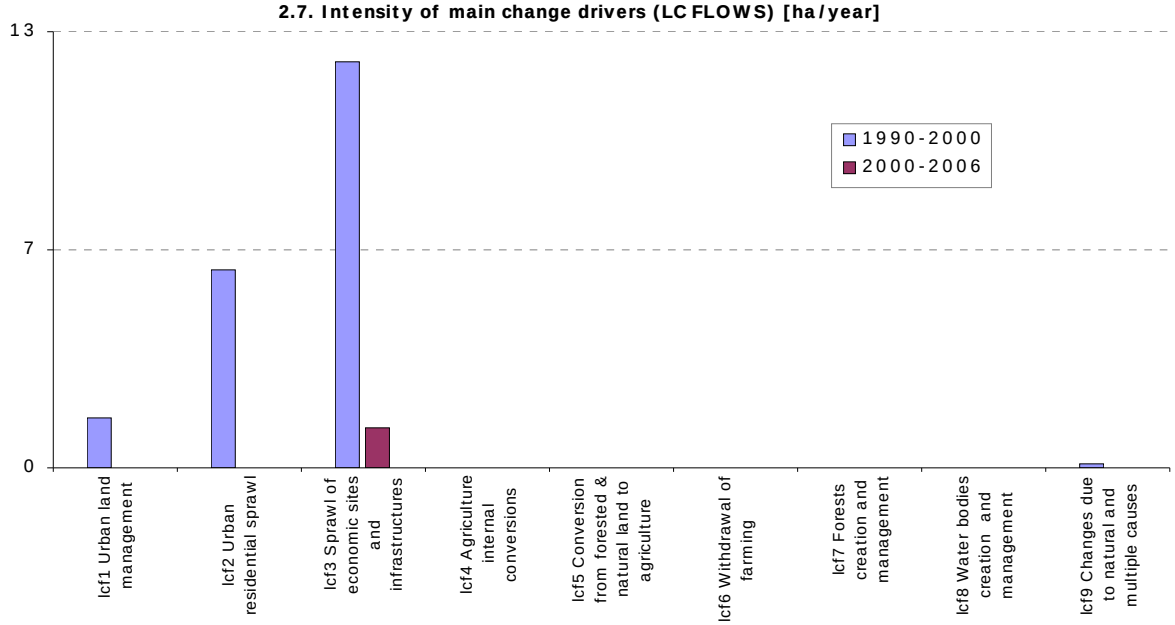


2.6. Net annual change of LC types [ha/year]



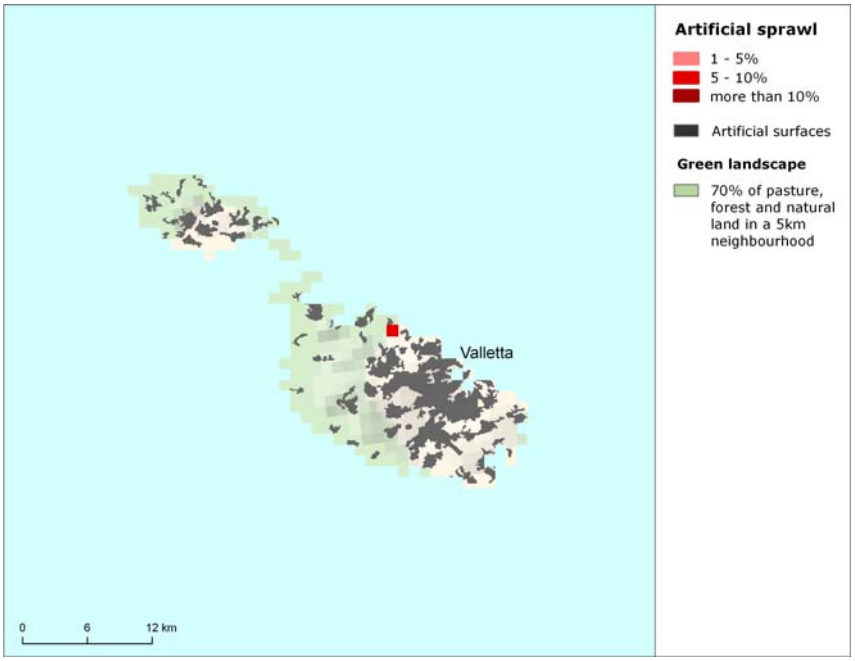
Summary trend figures	1990-2000	2000-2006
Annual land cover change [ha/year]	**20**	**1**
Annual land cover change as % of initial year	**0.07%**	**0.00%**
Land uptake by artificial development as mean annual change [ha/year]	18	1
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	13	0
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	0	0
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	0	0
Forest & other woodland net formation as mean annual change [ha/year]	0	0
Dry semi-natural land cover net formation as mean annual change [ha/year]	-5	-1
Wetlands & water bodies net formation as mean annual change [ha/year]	0	0

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

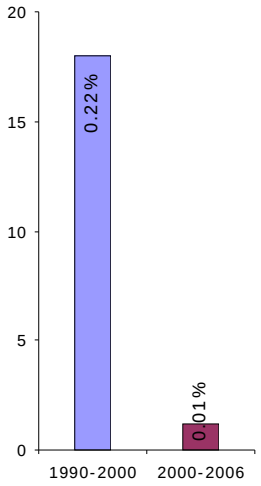


Malta

Artificial areas



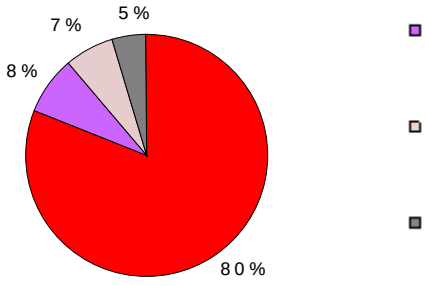
3.8. Artificial land take [ha/year, % of initial year]



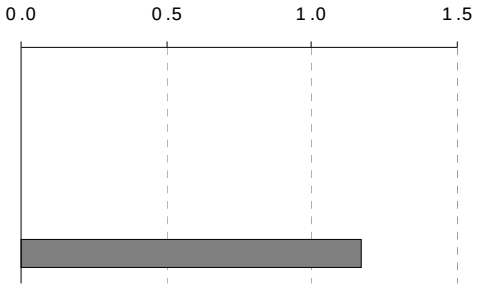
No major artificial development, dump site creation

Compared to the situation during 1990-2000, during which some urban development (namely extension of industrial/commercial sites, discontinuous urban fabric and mineral extraction sites, together with recycling of developed urban land) has been observed, artificial sprawl has not been detected in Malta during 2000-2006.
There was only one change, represented by creation of dump site over sclerophyllous vegetation area. This change covers only 7 hectares.

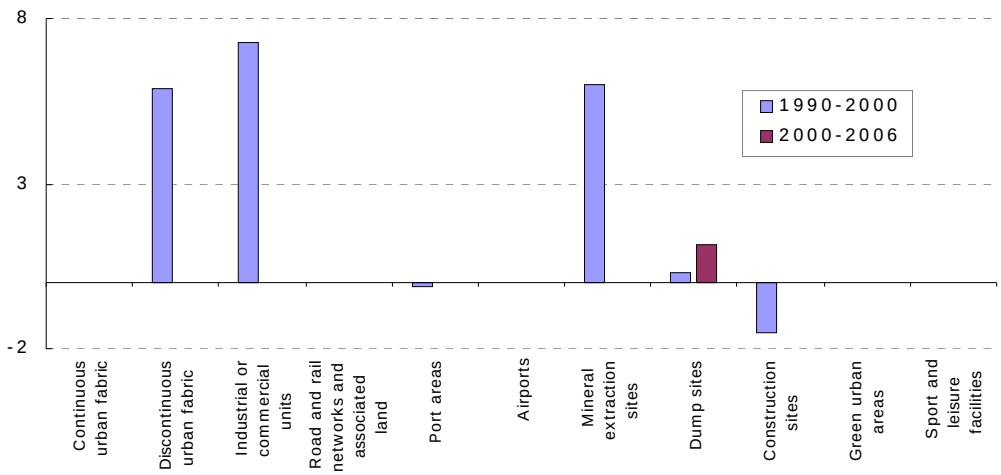
3.9. Artificial surfaces 2006 [% of total area]



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

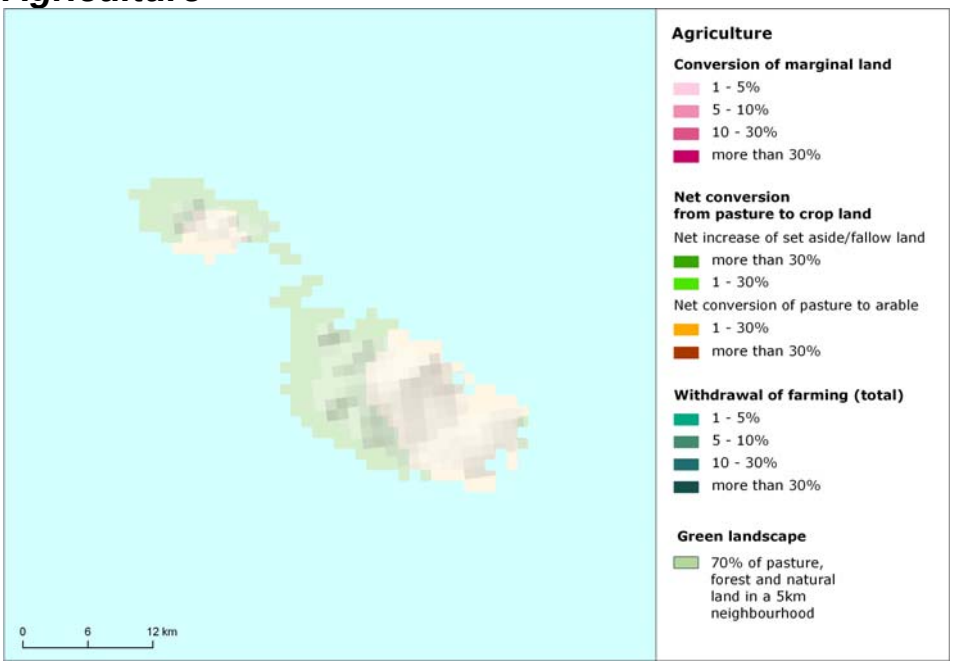


3.11. Mean annual artificial change by class [ha/year]



Malta

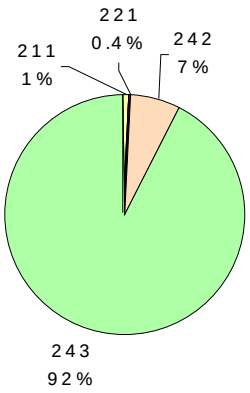
Agriculture



No change in agricultural land cover

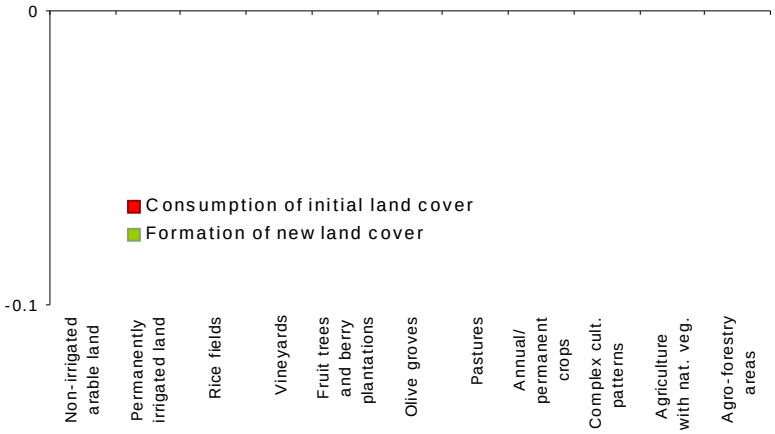
Agricultural land of Malta consists predominantly of agricultural land with significant areas of natural vegetation and to a lesser extent of complex cultivation patterns, with only negligible share of arable land and vineyards.
No changes of agricultural land have been detected in frame of CLC 2000-2006 change mapping.

4.12. Agricultural areas 2006 [% of total area]

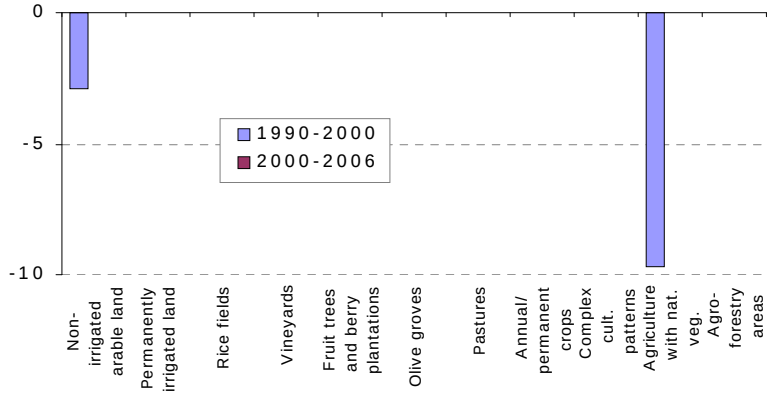


211 Non-irrigated arable land
212 Permanently irrigated land
213 Rice fields
221 Vineyards
222 Fruit trees and berry plantations
223 Olive groves
231 Pastures
241 Annual crops associated with permanent crops
242 Complex cultivation patterns
243 Agriculture land with significant areas of natural vegetation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

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

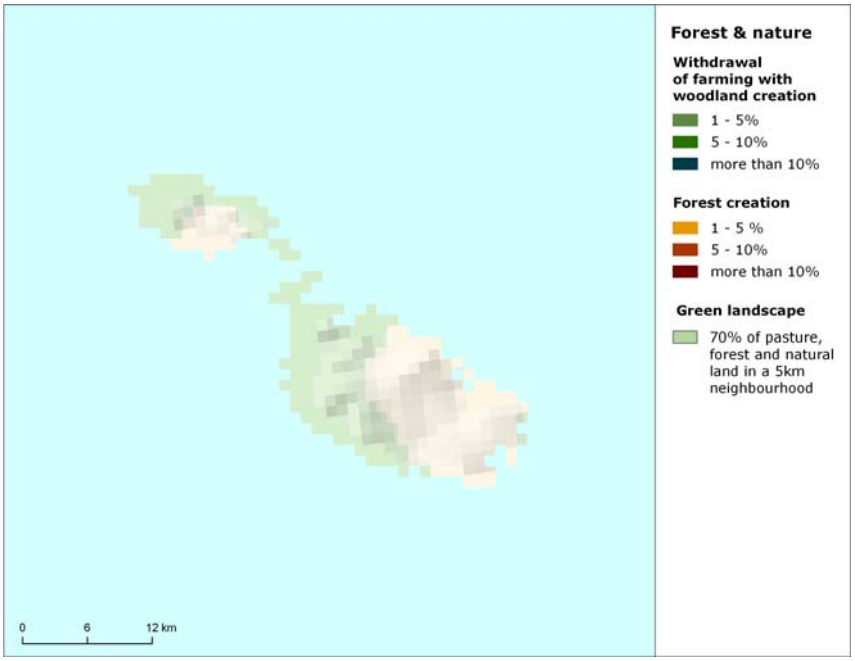


4.14. Mean annual agricultural change by class [ha/year]

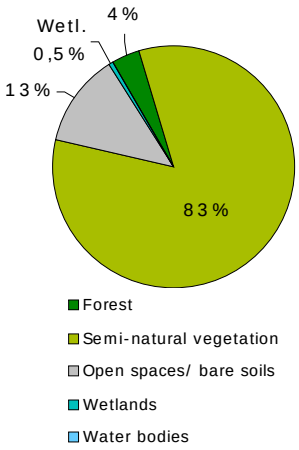


Malta

Forest & nature



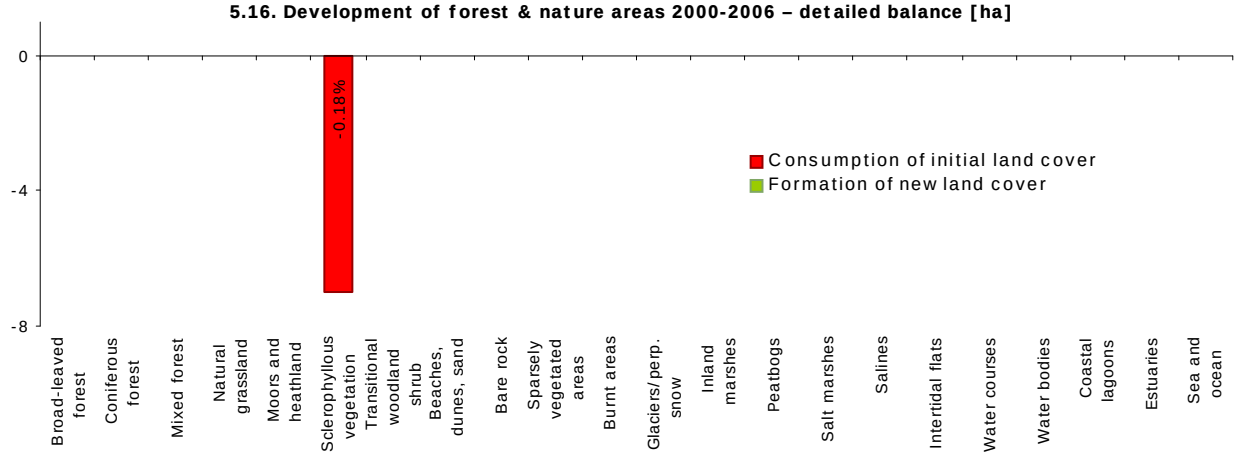
5.15. Forest & nature areas 2006 [% of total area]



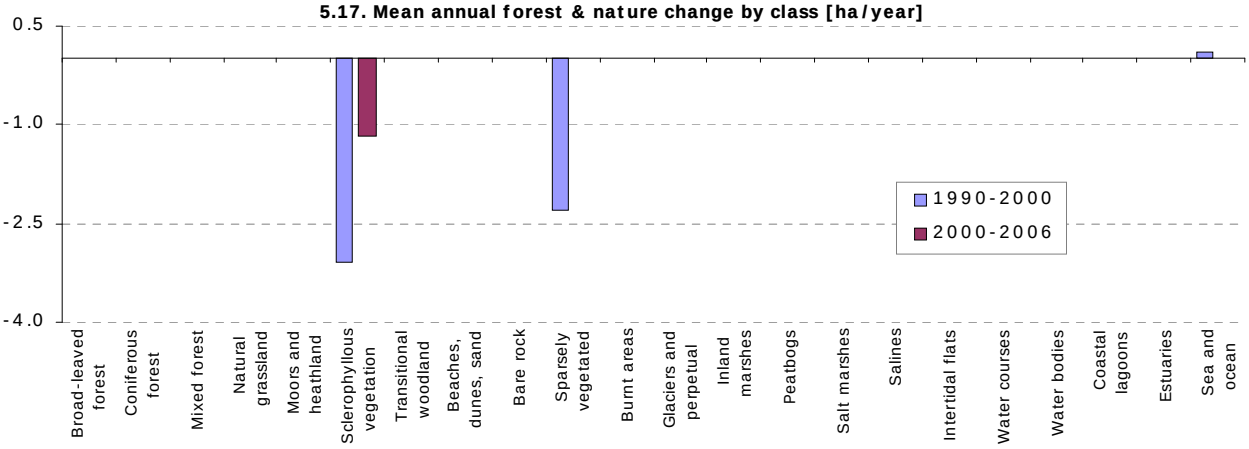
Natural areas almost without change

Natural areas in Malta are characteristic by dominant share of semi-natural vegetation (represented by sclerophyllous vegetation), followed by sparsely vegetated areas. The only change of natural land cover which has been observed during 2000-2006 is 7 hectares uptake of sclerophyllous vegetation area by extension of dump site near the capital city Valleta.

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



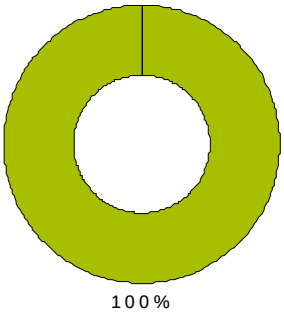
5.17. Mean annual forest & nature change by class [ha/year]



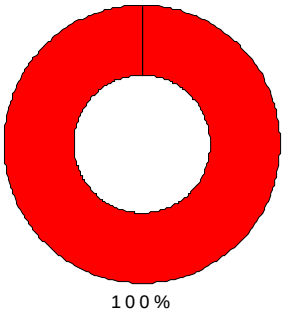
Annex: Land cover flows and trends

Land cover flows 2000-2006

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

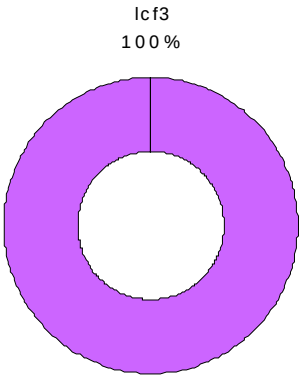


6.19. Formation of land cover 2000-2006 [% of total change area]



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]

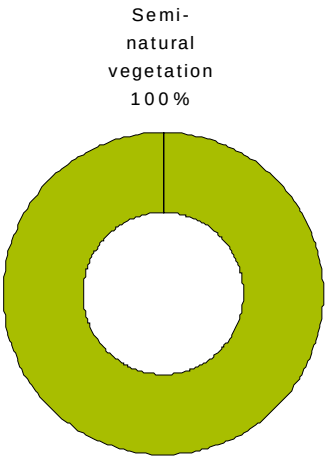


lcf1 Urban land management
lcf2 Urban residential sprawl
lcf3 Sprawl of economic sites and infrastructures
lcf4 Agriculture internal conversions
lcf5 Conversion from forested & natural land to agriculture
lcf6 Withdrawal of farming
lcf7 Forests creation and management
lcf8 Water bodies creation and management
lcf9 Changes due to natural and multiple causes

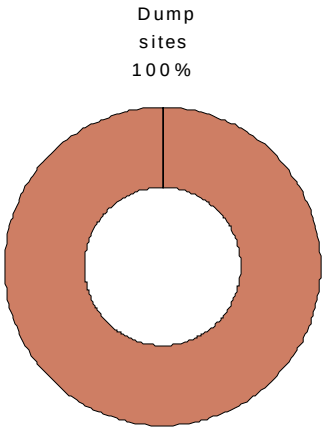
Malta

Artificial areas

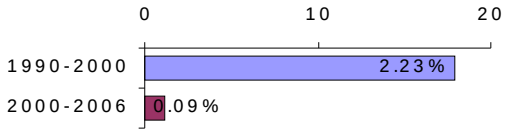
7.21. Consumption by artificial land take 2000-2006 [% of total]



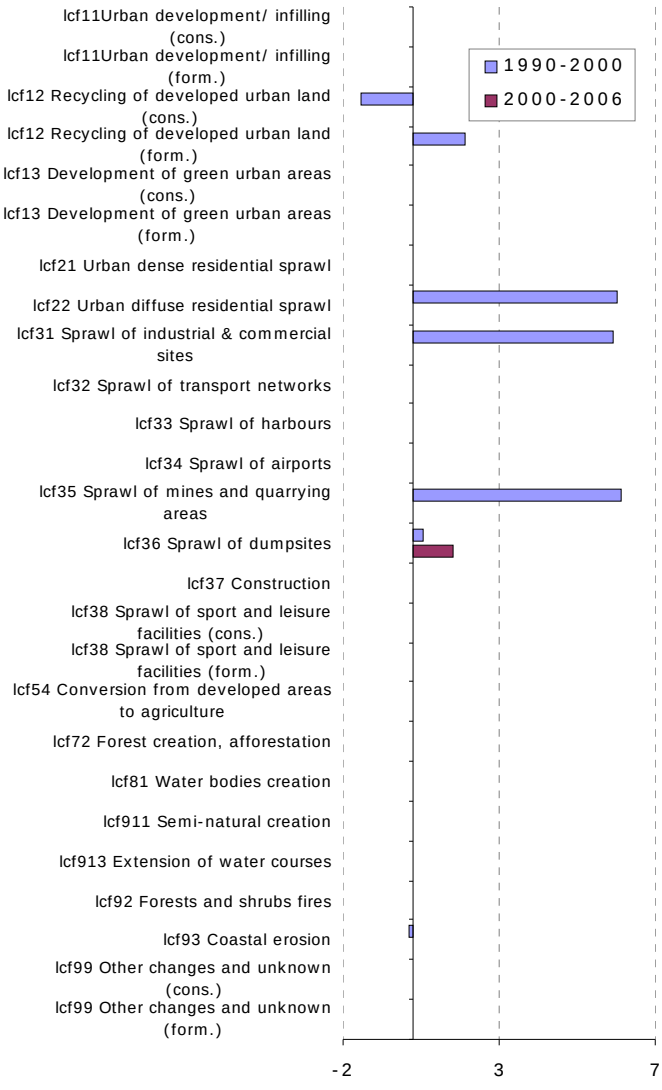
7.22. Formation by artificial land take 2000-2006 [% of total]



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



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



Malta

Agriculture

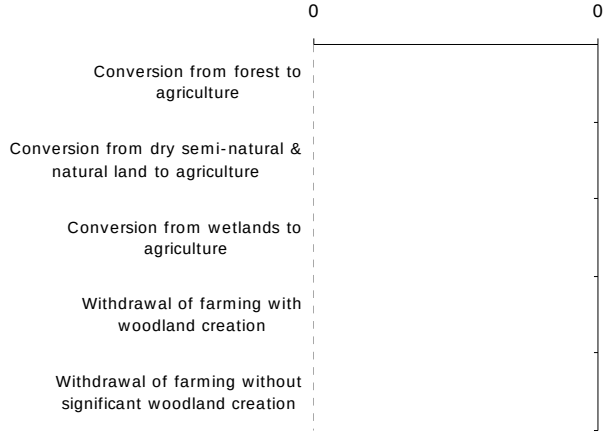
8.25. LC consumed by agriculture 2000-2006 [% of total]

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

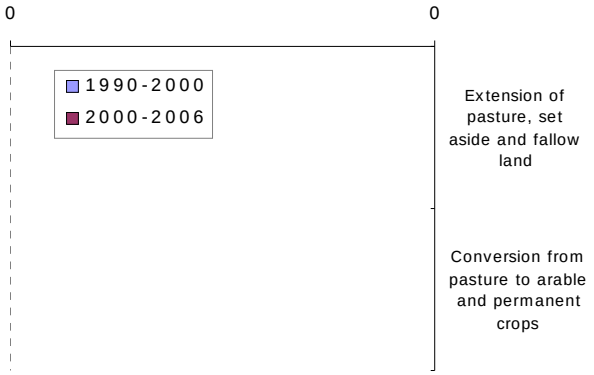
8.27. Consumption of agricultural land by non-agriculture 2000-2006 [% of total]

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]

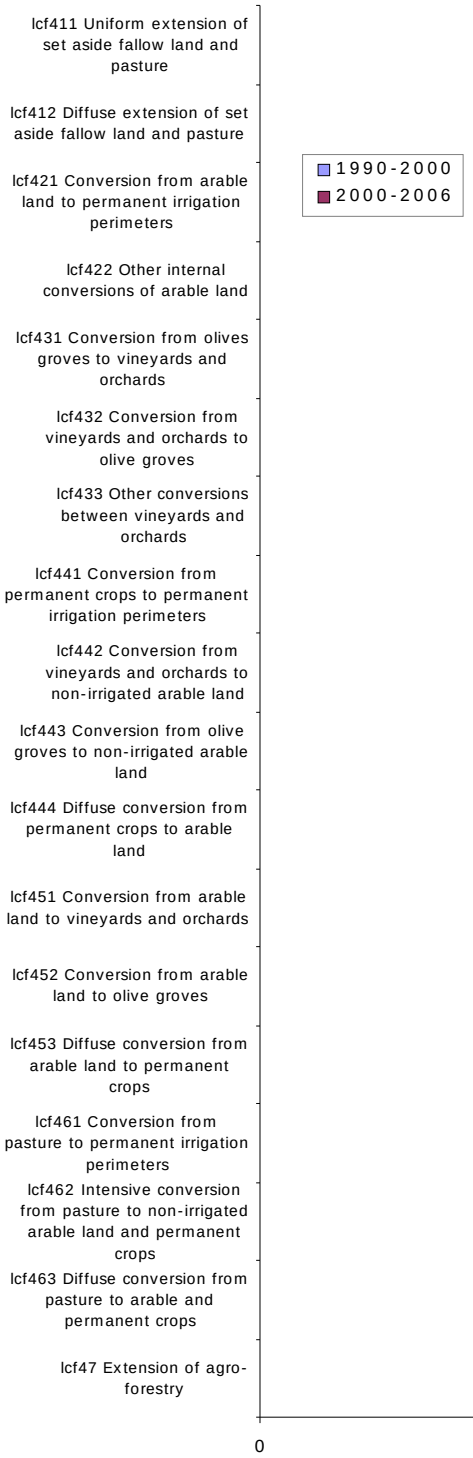


8.30. Mean annual conversion between arable land and pasture [ha/year]

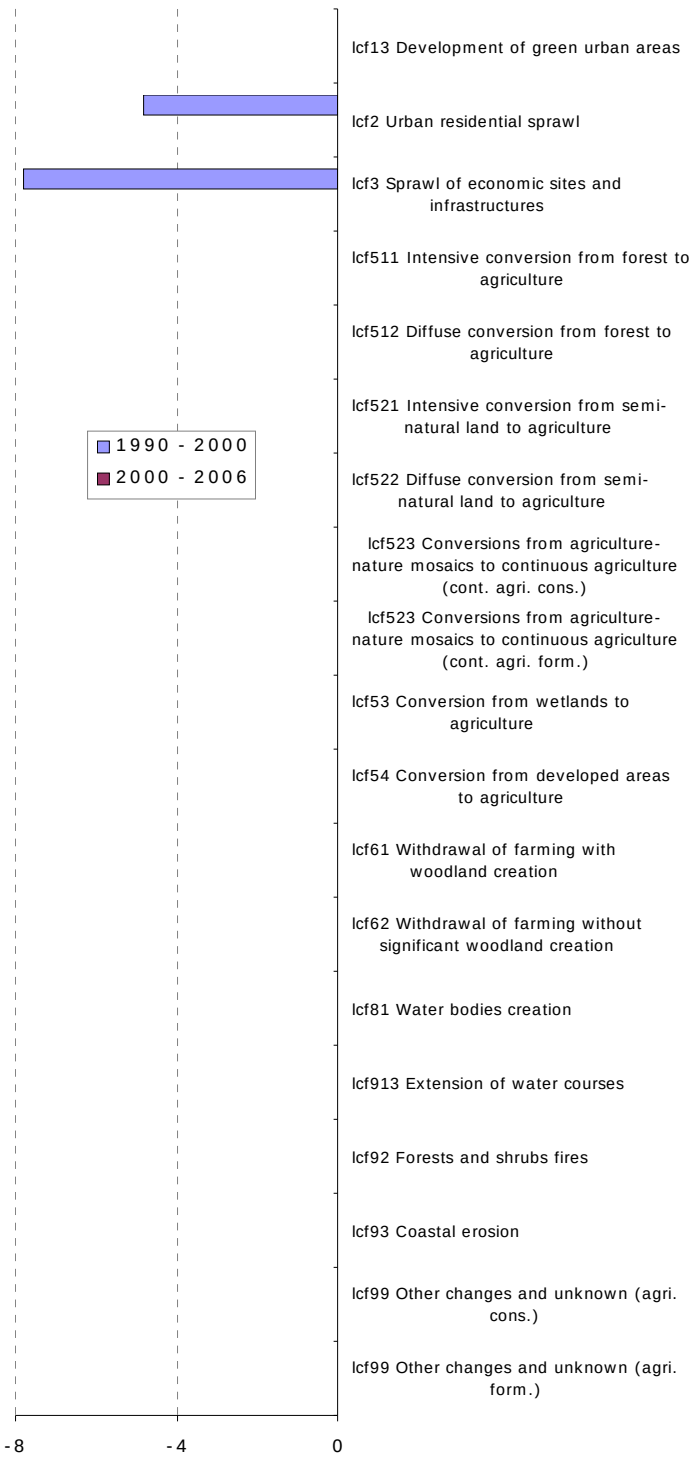


Malta

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



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



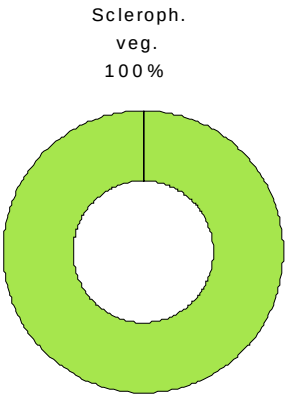
Malta

Forest & nature

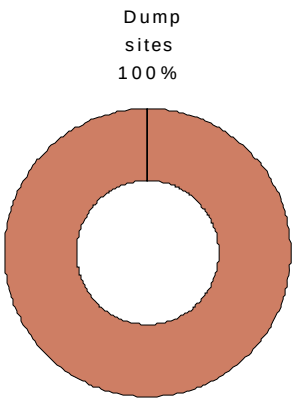
10.33. LC consumed by forest & nature 2000-2006 [% of total]

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

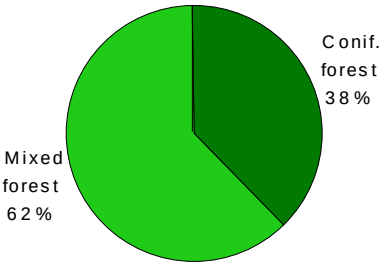
10.35. Consumption of forest & nature land by non-forest/nature 2000-2006 [% of total]



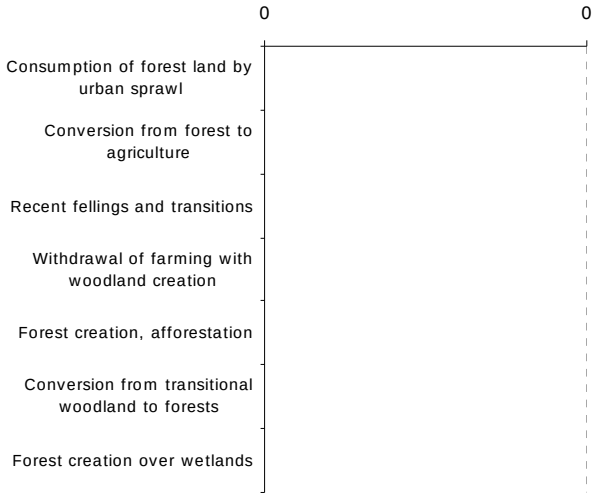
10.36. Formation of non-forest/nature land from forest & nature 2000-2006 [% of total]



10.37. Forested land 2006 [% of total area]

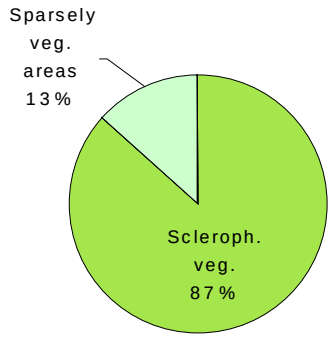


10.38. Main trends in woodland & forests consumption/formation 2000-2006 [ha/year]

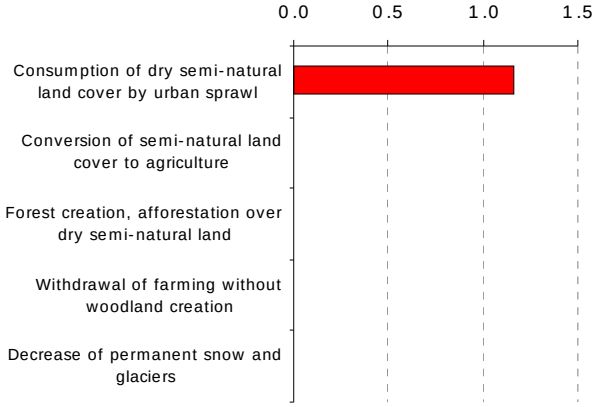


Malta

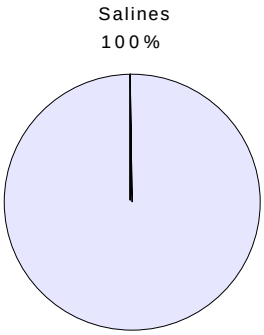
11.39. Dry semi-natural areas 2006 [% of total area]



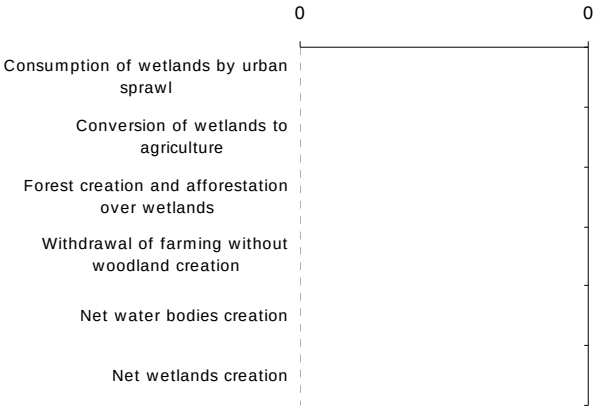
11.40. Main trends in dry semi-natural land consumption/formation 2000-2006 [ha/year]



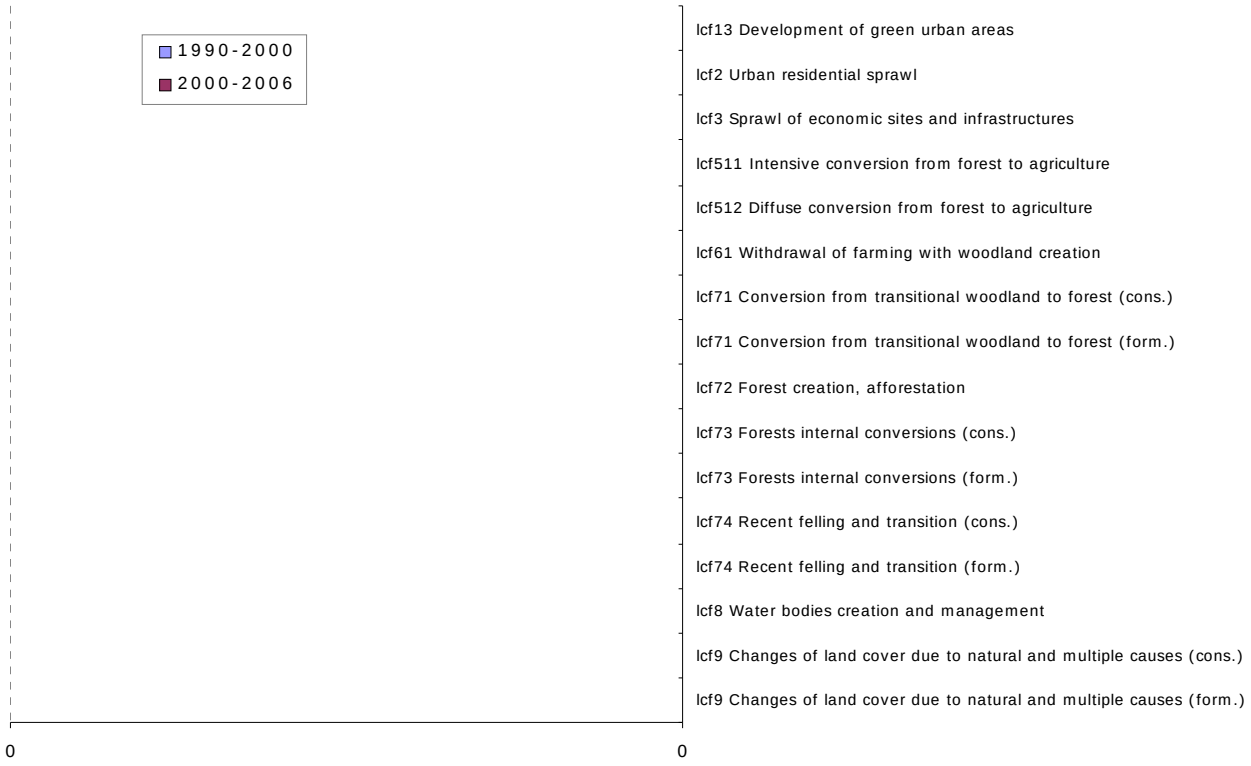
11.41. Wetlands & water 2006 [% of total area]



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

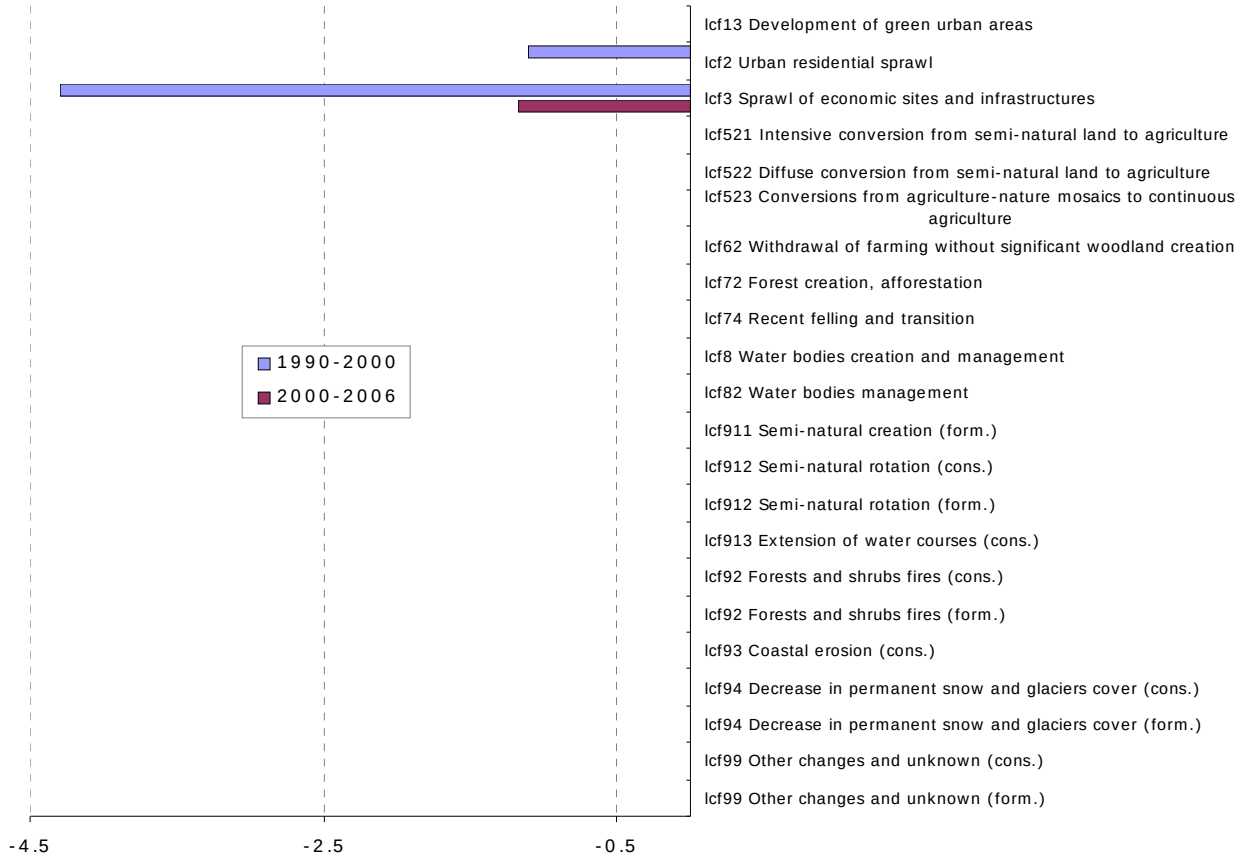


11.43. Mean annual conversions of forest & other woodland [ha/year]

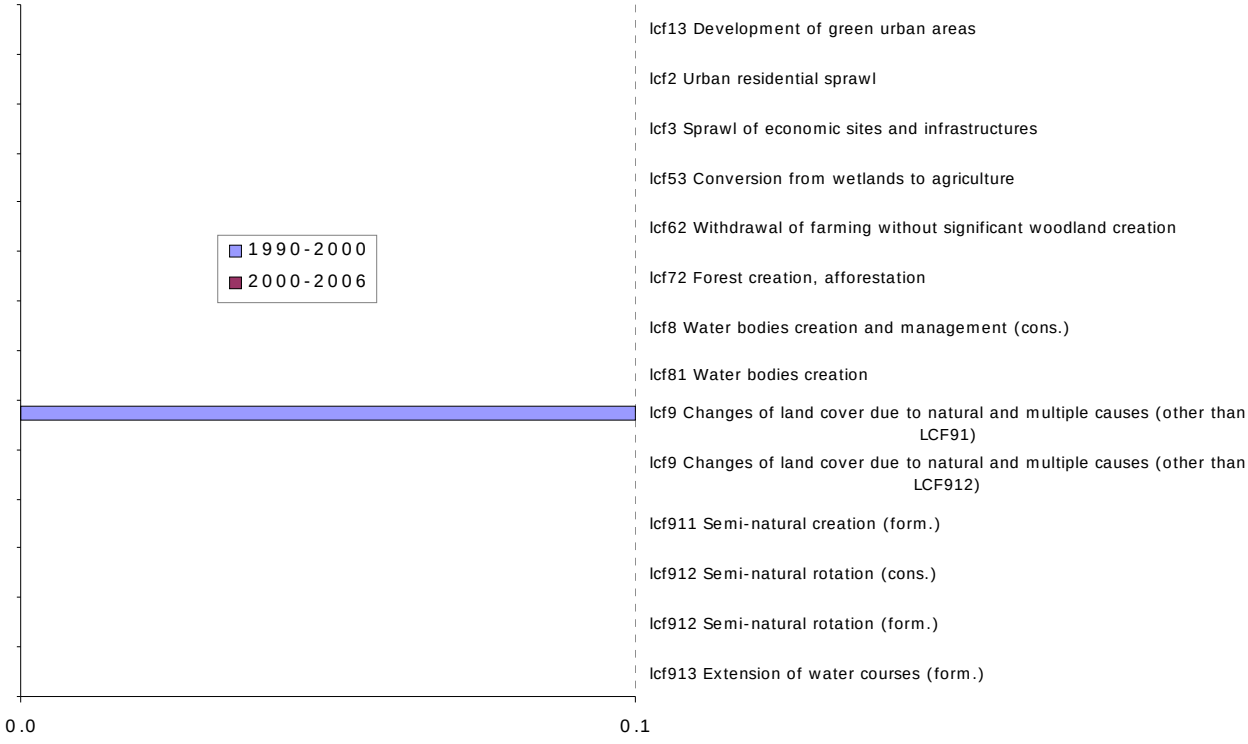


Malta

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

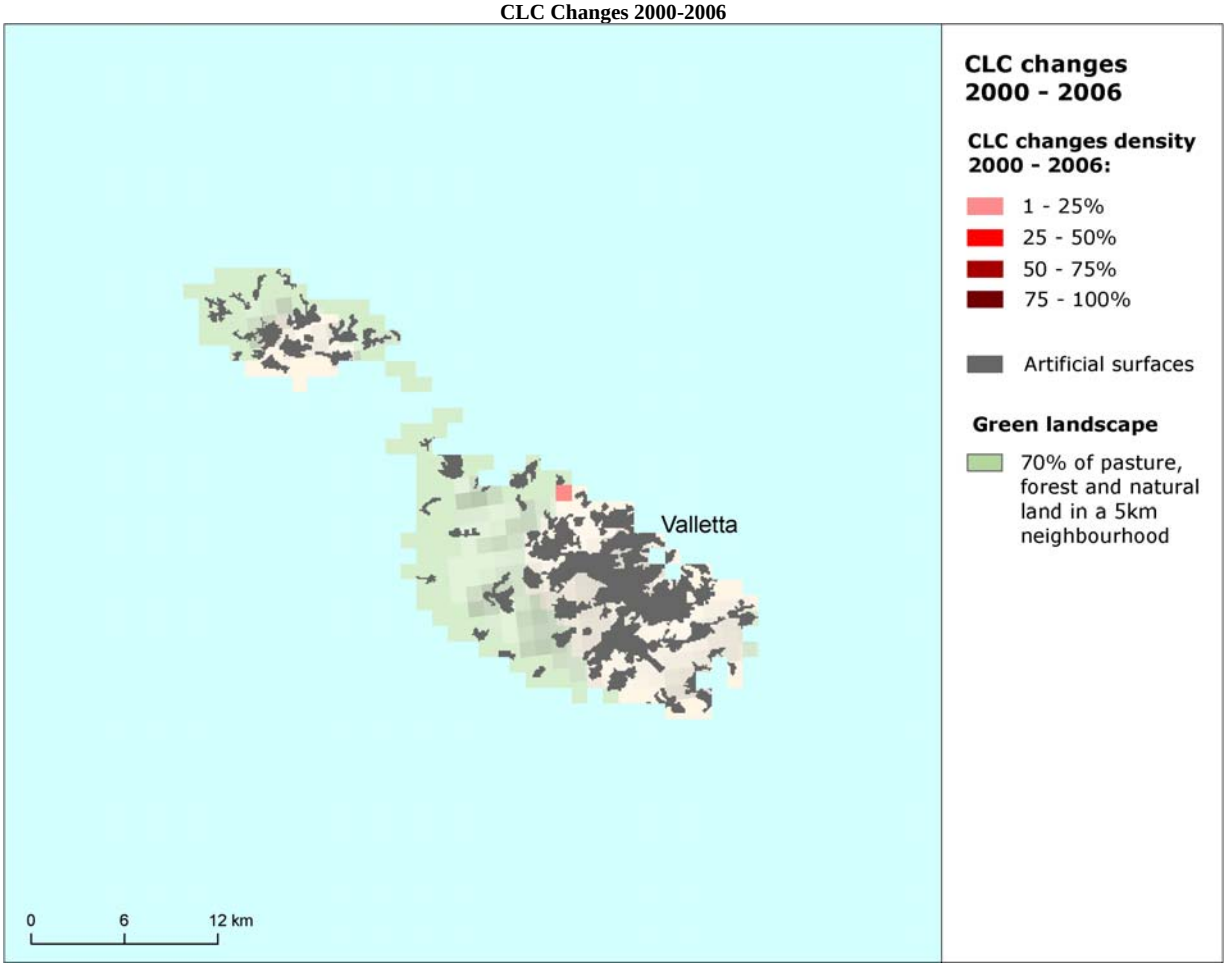


12.45. Mean annual conversions of wetlands and water LC [ha/year]

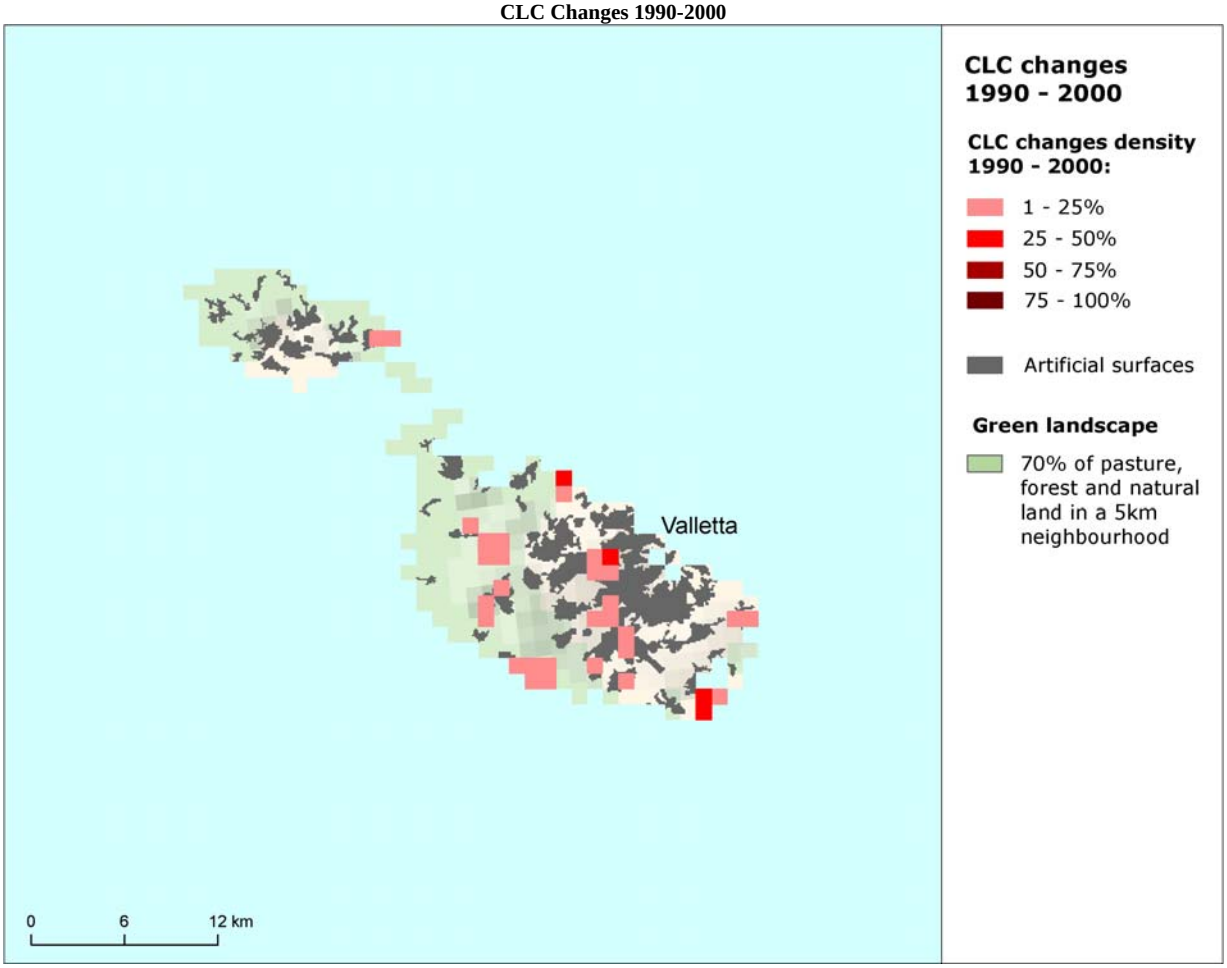


Malta

CLC Changes 2000-2006

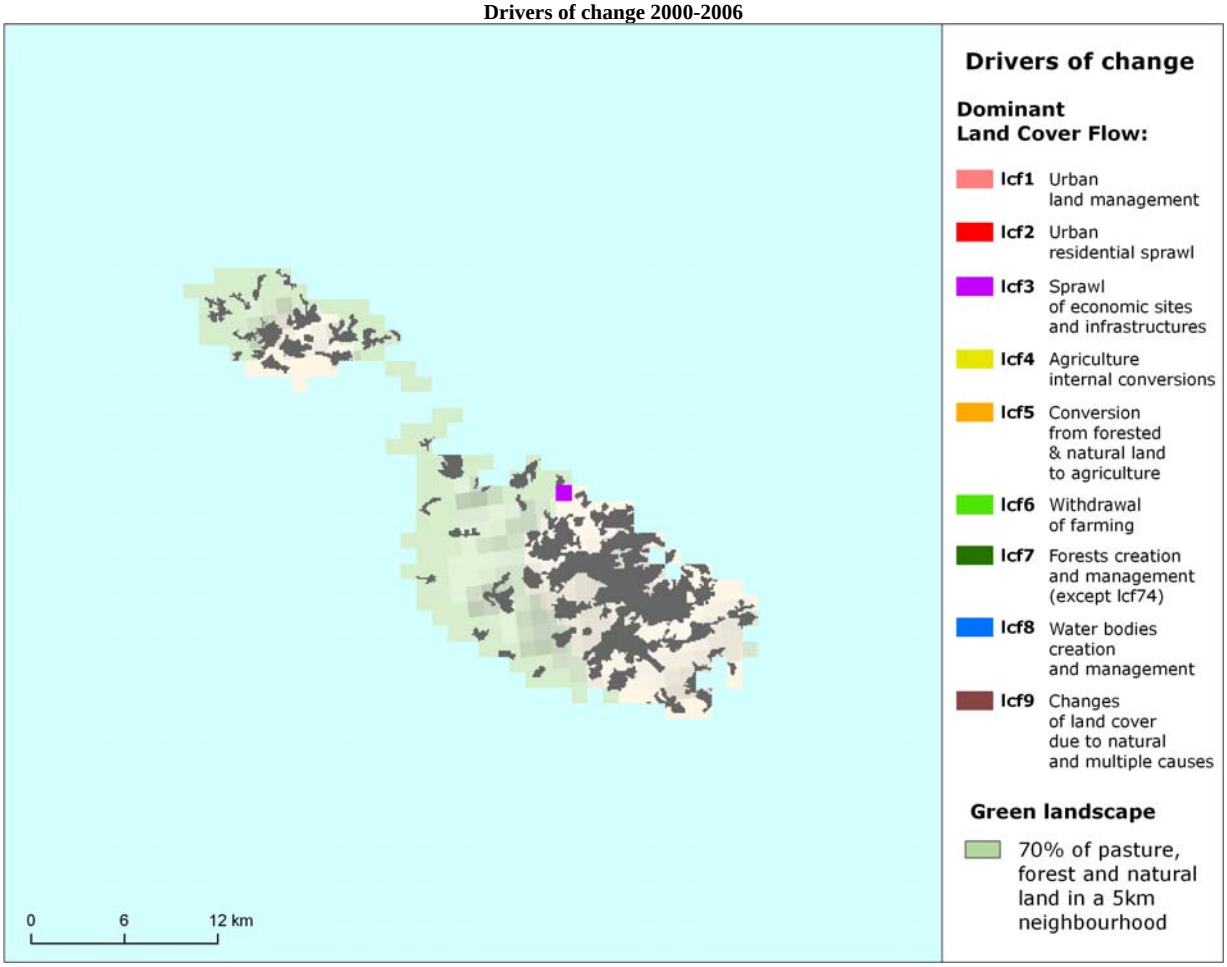


CLC Changes 1990-2000

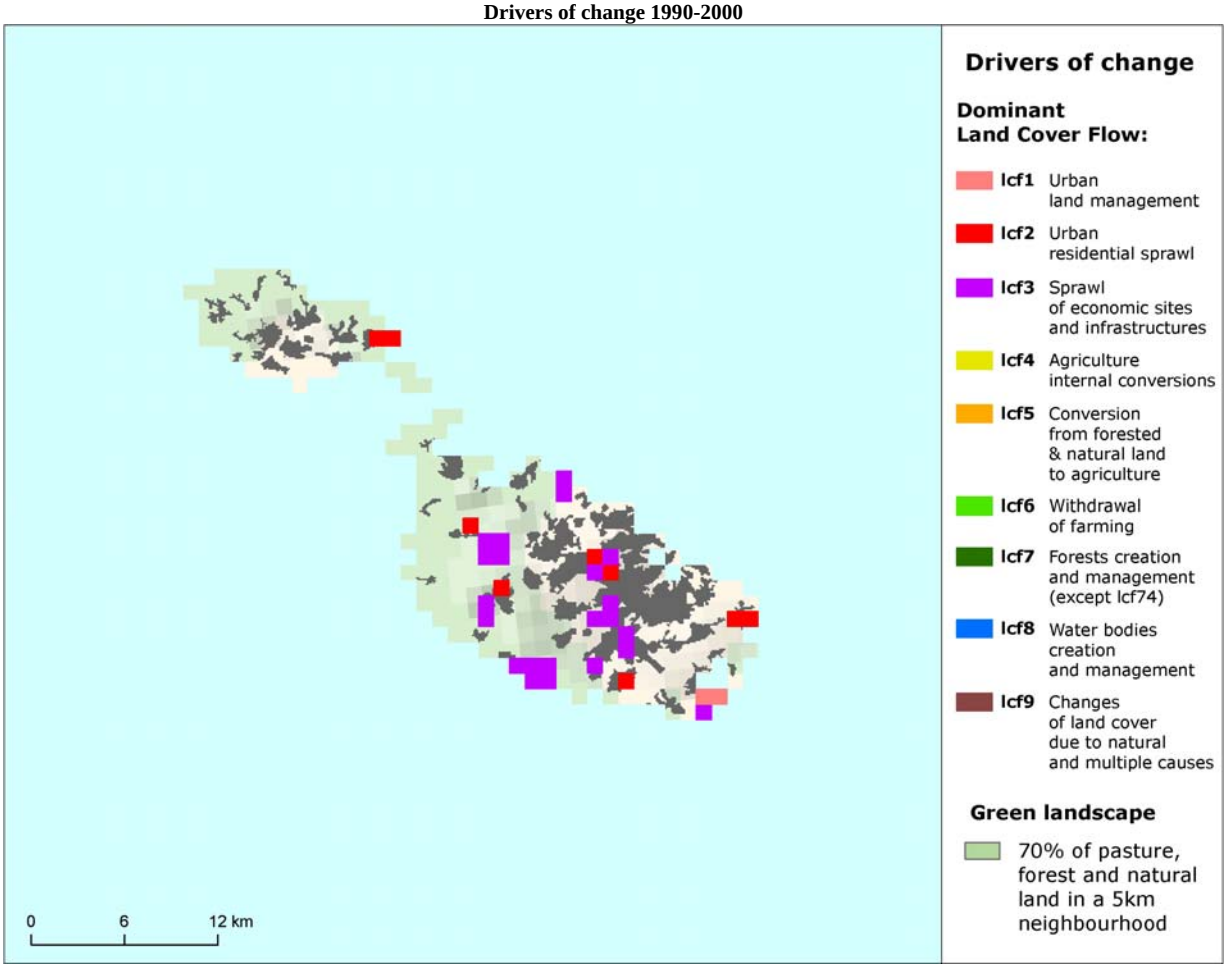


Malta

Drivers of change 2000-2006

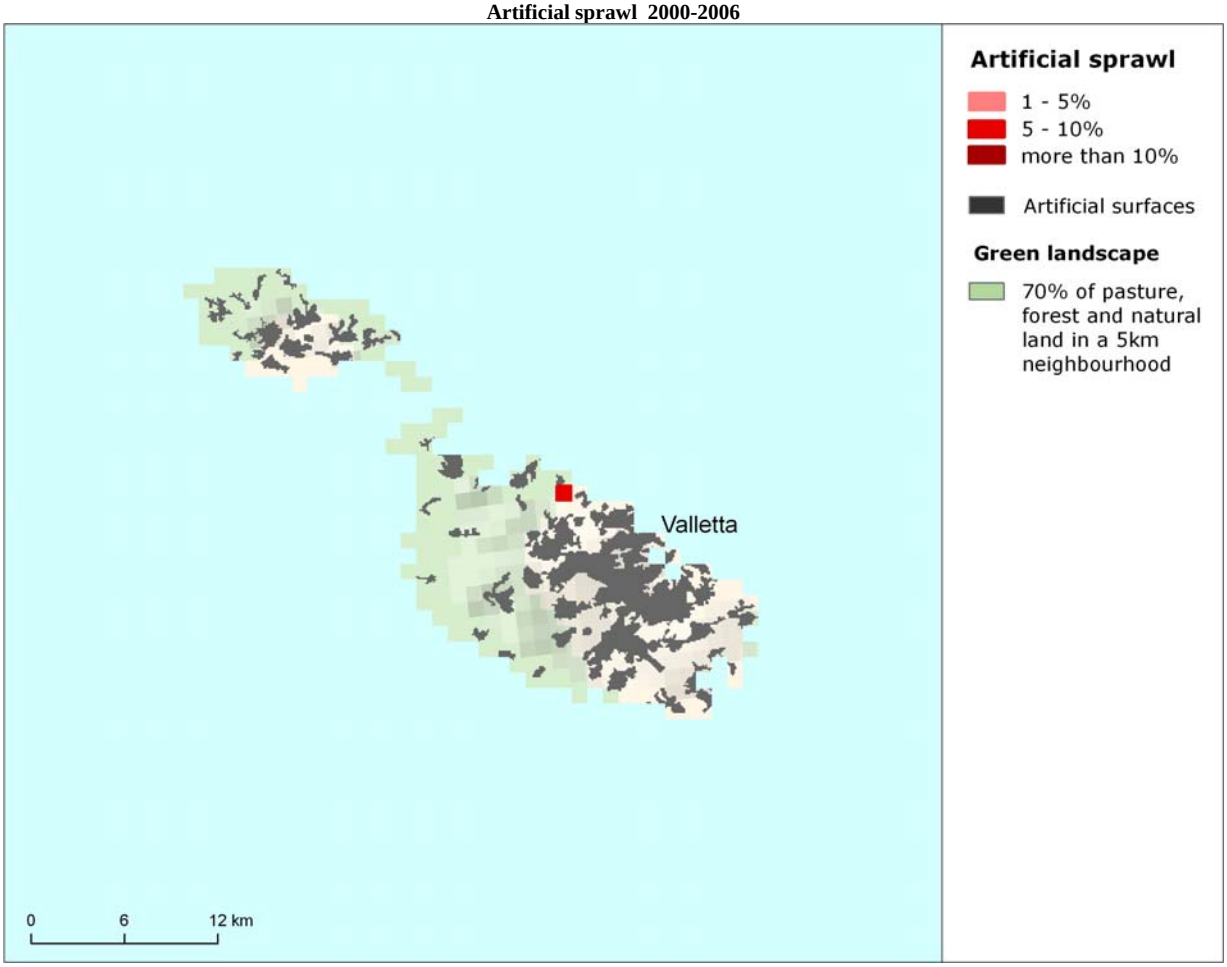


Drivers of change 1990-2000

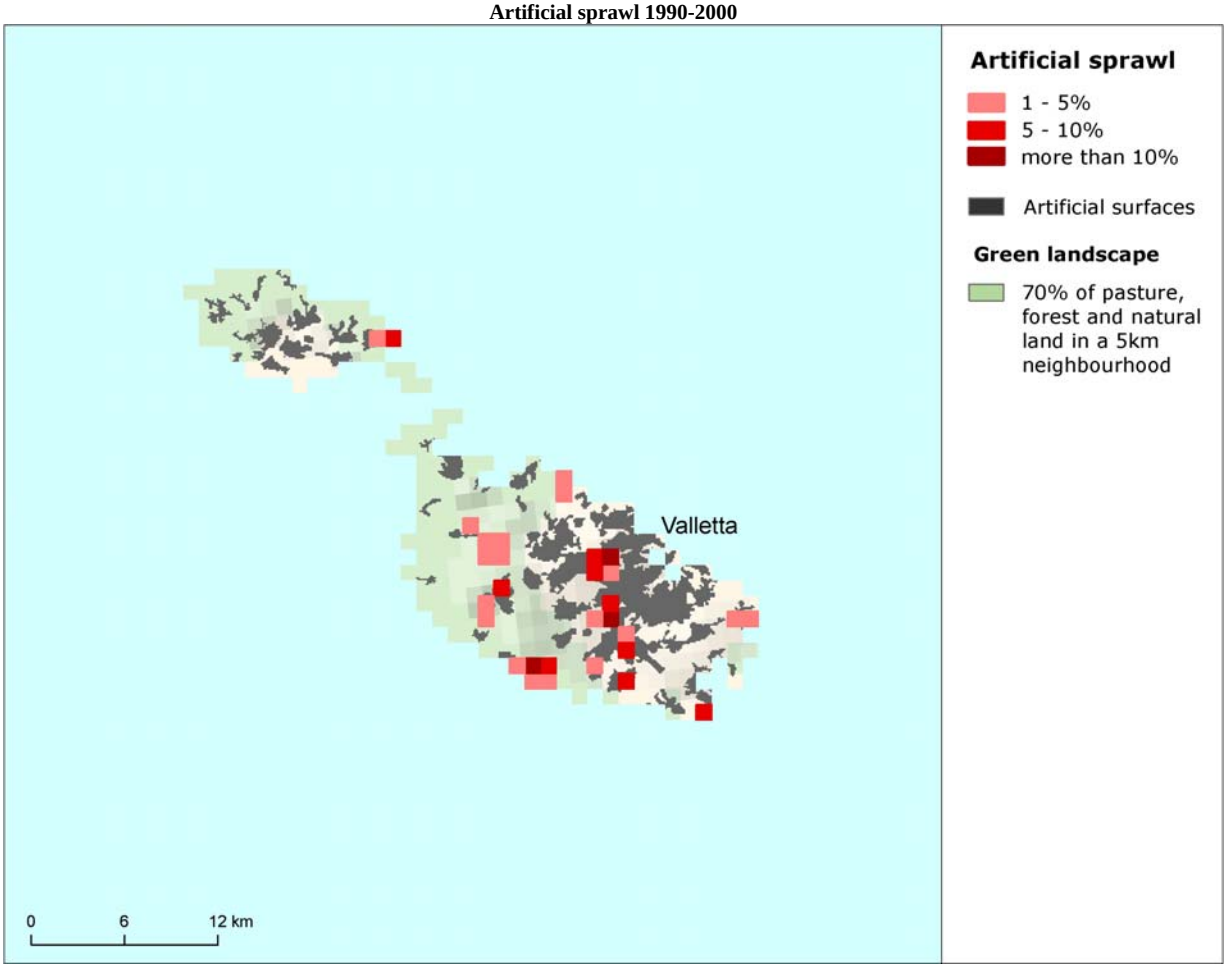


Malta

Artificial sprawl 2000-2006



Artificial sprawl 1990-2000



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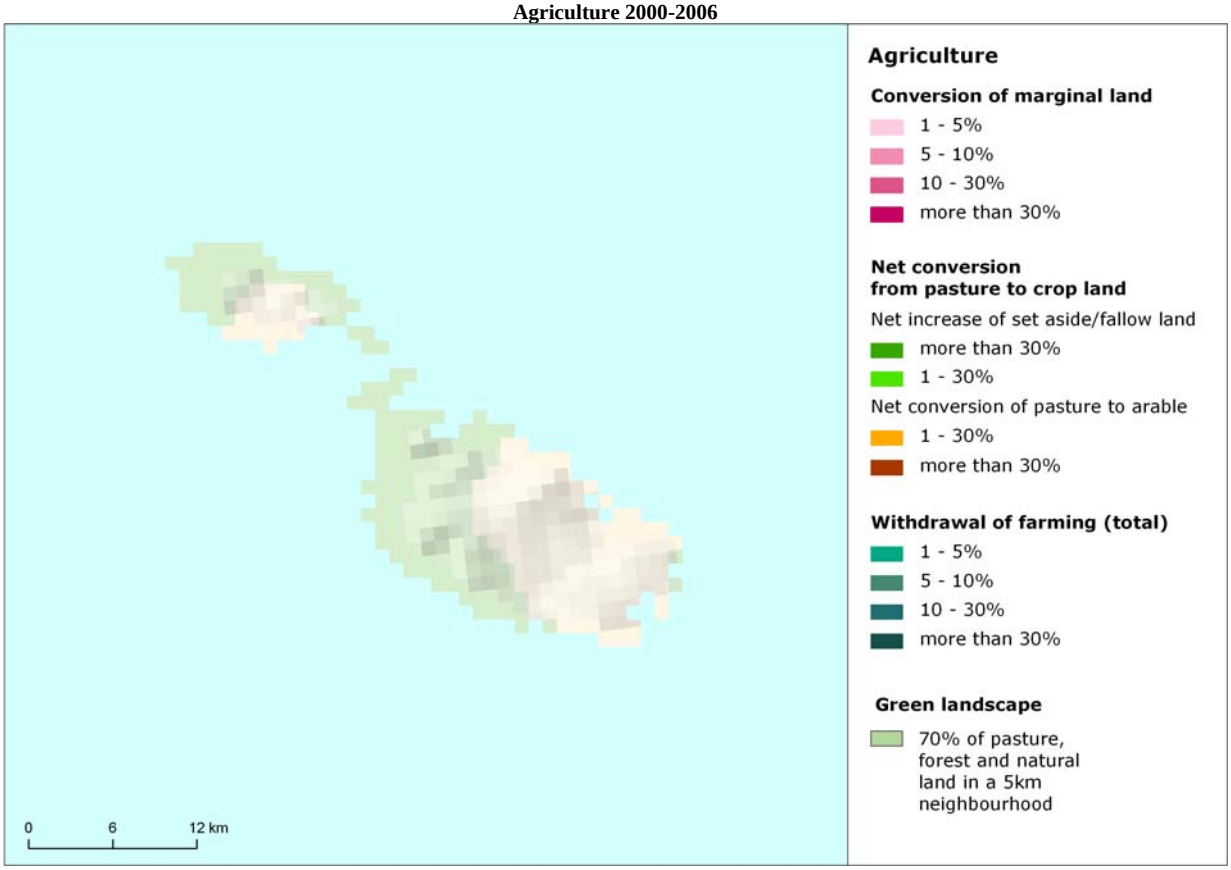
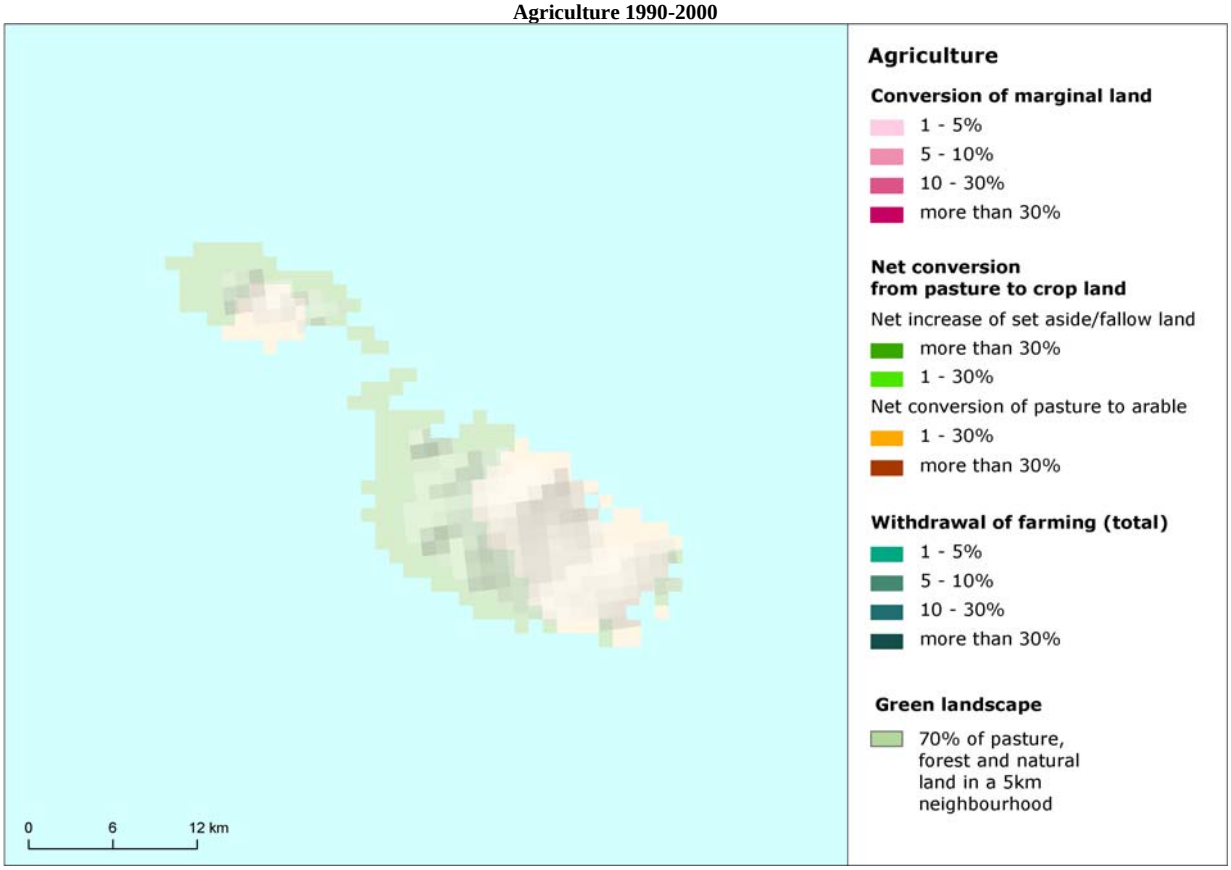
Agriculture 2000-2006

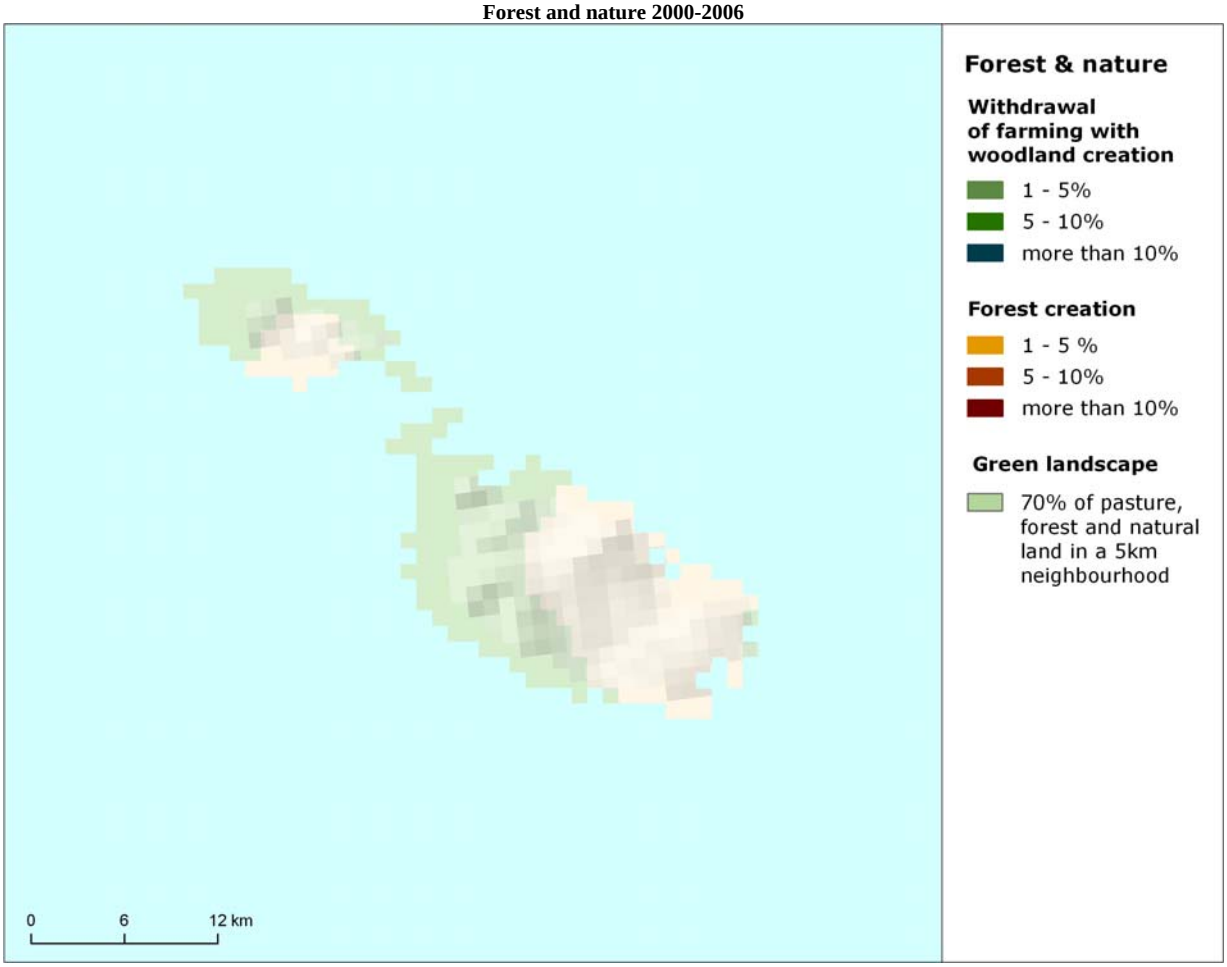


Agriculture 1990-2000



Malta

Forest and nature 2000-2006



Forest and nature 1990-2000