

Land cover 2012



Cyprus



September 2017

Photo: © Toni García, My City/EEA



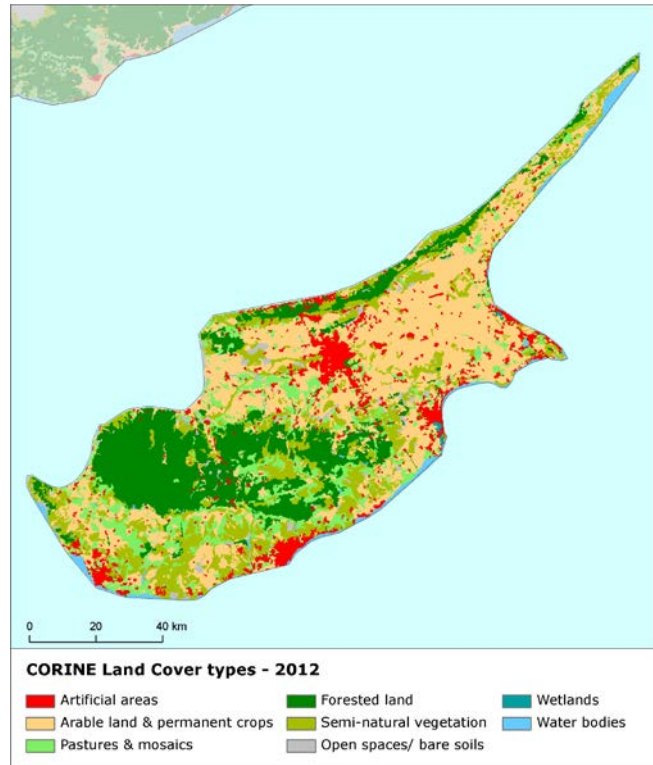
Land cover 2012

Overview of land cover & change 2006-2012

In the period 2006-2012, there has been observed significant decrease of intensity of overall land cover change in Cyprus, characterized by decrease of the annual land cover change rate from 0,49% in 2000-2006 to 0,18% in 2006-2012. This means that the overall speed of landscape development is slightly below the European average. Comparison with previous period shows, that all artificial sprawl, agricultural and forest conversions lost much of their intensities. From all main land cover flows, only urban land management and changes due to natural and multiple causes have higher intensity, compared to 2000-2006.

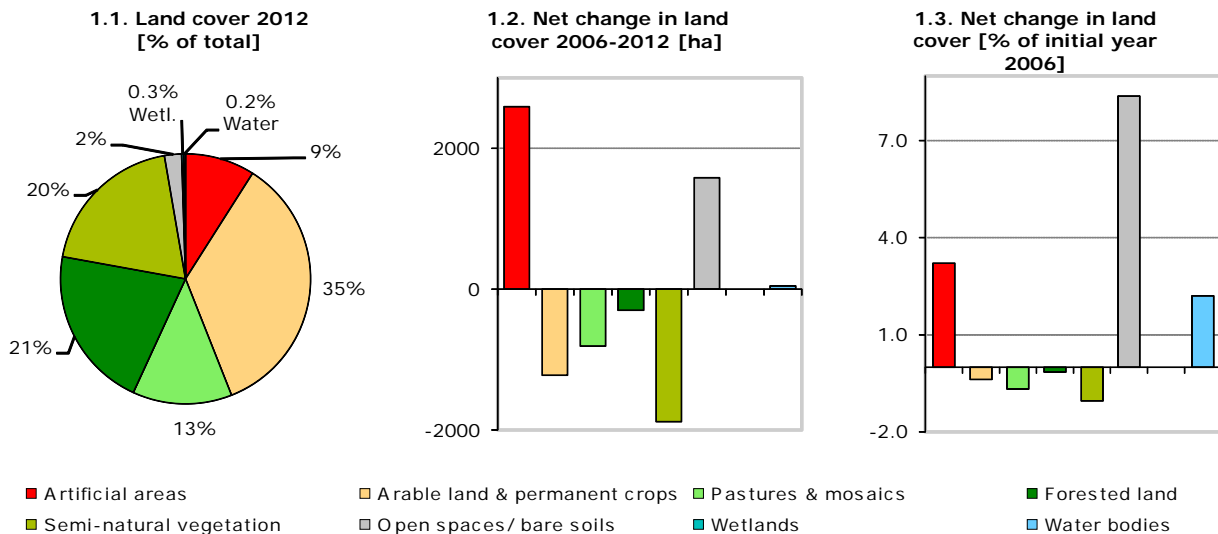
As a result, the sprawl of economic sites and infrastructures, driven mainly by construction, is the most powerful driver of change in Cyprus in the period 2006-2012. It also holds the annual artificial land take rate on 0,61%, which, although much lower than in previous period (2,56%), is still one of the highest sprawl rates in Europe.

As usual, sprawl consumes mostly agricultural land, with comparable share of arable and pasture land and also semi-natural vegetation areas in Cyprus. After this flow, changes due to natural and multiple causes (represented mainly by shrub fires), are the second most significant drivers of change in the Cyprian landscape.



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 more than decade between 2000-2006-2012 - see Corine land cover (CLC) programme for details.

Number of years between CLC2006-CLC2012 data for Cyprus: 6

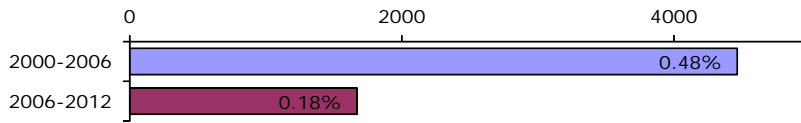


Summary balance table 2006-2012

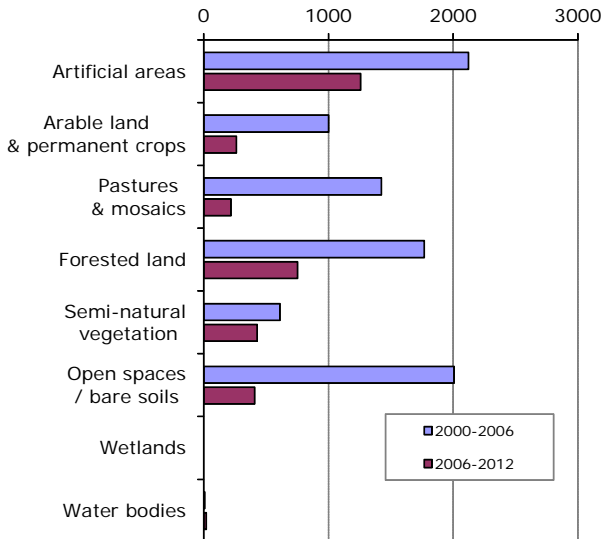
	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
Land cover 2006	807	3249	1197	1944	1816	189	25	21	9248
Consumption of initial LC	24.7	14.0	10.6	24.1	22.3	4.3	0.0	0.4	100
Formation of new LC	50.6	1.7	2.5	21.0	3.5	20.1	0.0	0.8	100
Net Formation of LC	25.9	-12.2	-8.1	-3.0	-18.8	15.8	0.0	0.5	0
Net formation as % of initial year	3.2	-0.4	-0.7	-0.2	-1.0	8.4	0.0	2.2	
Total turnover of LC	75.4	15.7	13.0	45.1	25.7	24.4	0.0	1.2	200
Total turnover as % of initial year	9.3	0.5	1.1	2.3	1.4	12.9	0.0	5.6	2.2
Land cover 2012	833	3237	1189	1941	1798	205	25	21	9248

Land cover trends comparison 2000-2006 vs. 2006-2012

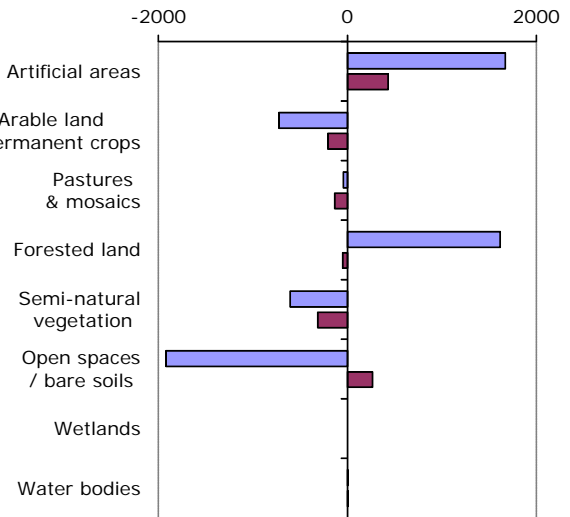
2.4. Annual land cover change
[ha/year, % of total area]



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

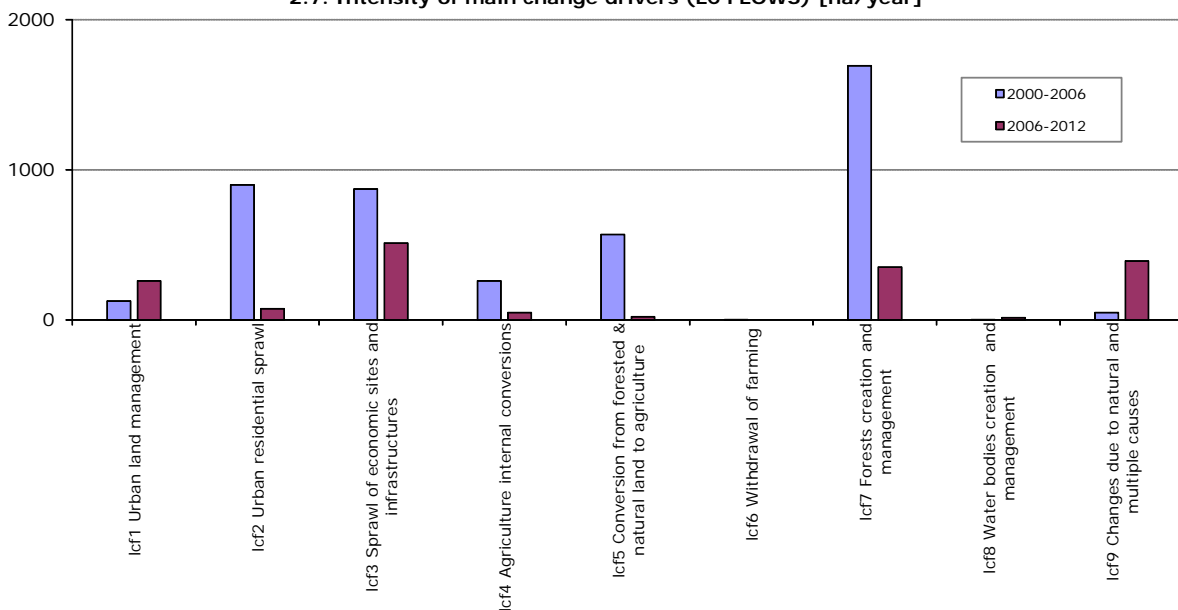


2.6. Net annual change of LC types [ha/year]

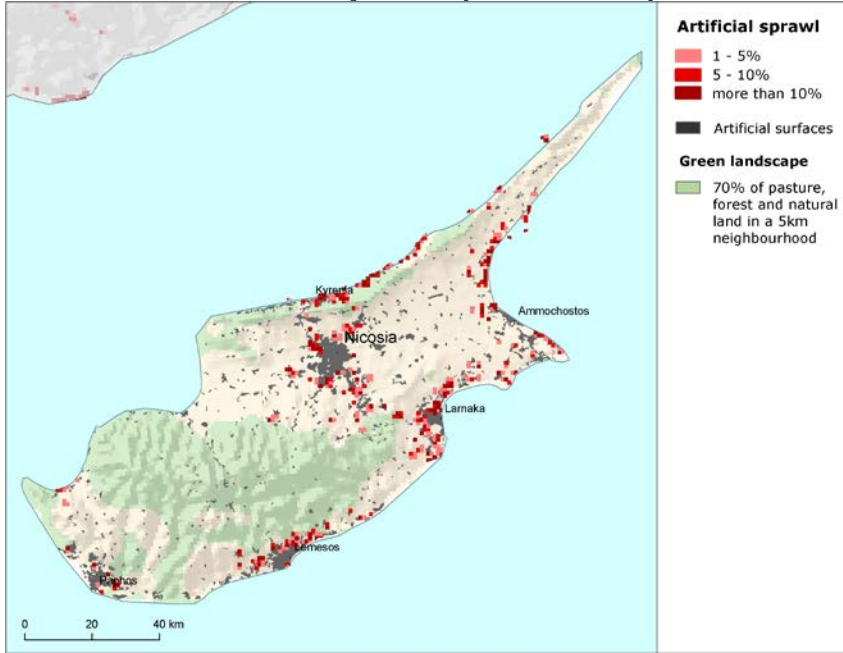


Summary trend figures		
	2000-2006	2006-2012
Annual land cover change [ha/year]	4467	1671
Annual land cover change as % of initial year	0.48%	0.18%
Land uptake by artificial development as mean annual change [ha/year]	1733	471
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	1274	344
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	532	19
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	-134	-22
Forest & other woodland net formation as mean annual change [ha/year]	1615	-50
Dry semi-natural land cover net formation as mean annual change [ha/year]	-2169	-47
Wetlands & water bodies net formation as mean annual change [ha/year]	3	8

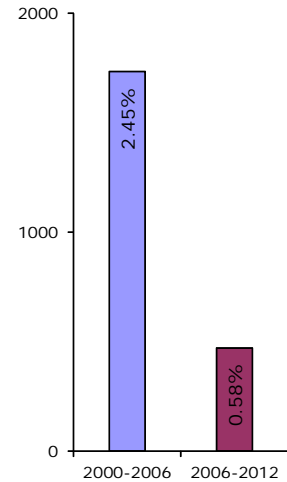
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



Artificial surfaces sprawl (2006-2012)



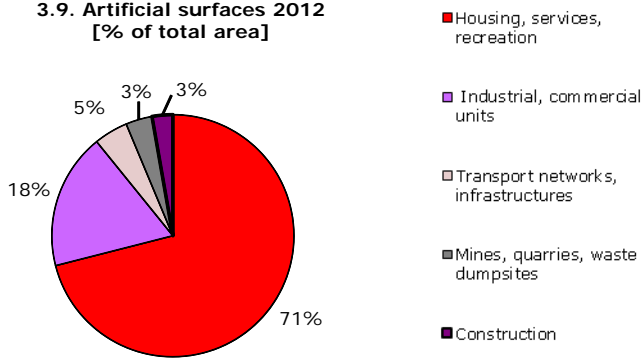
3.8. Artificial land take [ha/year, % of initial year]



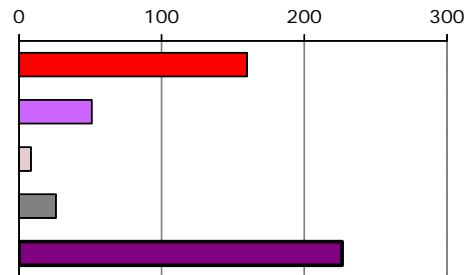
Rapid slowdown of residential sprawl

Despite its rapid slowdown, the artificial land take in Cyprus is still one of the highest in Europe and the major driver of landscape change in the country. This overall slowdown is caused mainly by decrease of diffuse residential sprawl, which was the main driver of artificial development in the previous period. This residential sprawl was probably connected to rapid development of tourism, with significant growth of accommodation facilities. In the period 2006-2012, the residential sprawl became only the second most powerful driver, leaving construction on the first position, with a bit higher intensity. The map shows, that the residential sprawl disappeared mostly from the western part of the island (especially from the surroundings of Paphos city). There were also significant concentrations of the residential development on the northern and eastern shore and around the Lemesos city in the south in the previous period, which, all, disappeared in the 2006-2012.

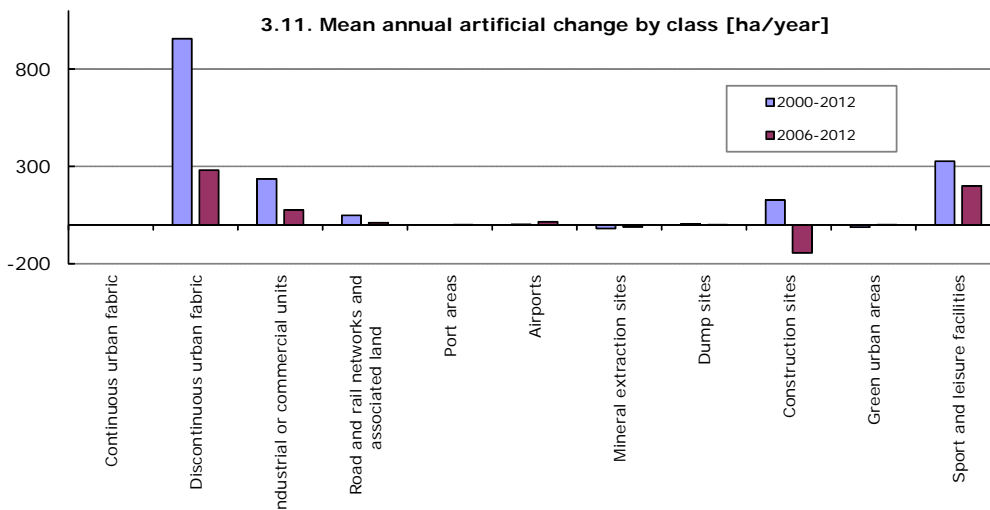
3.9. Artificial surfaces 2012 [% of total area]



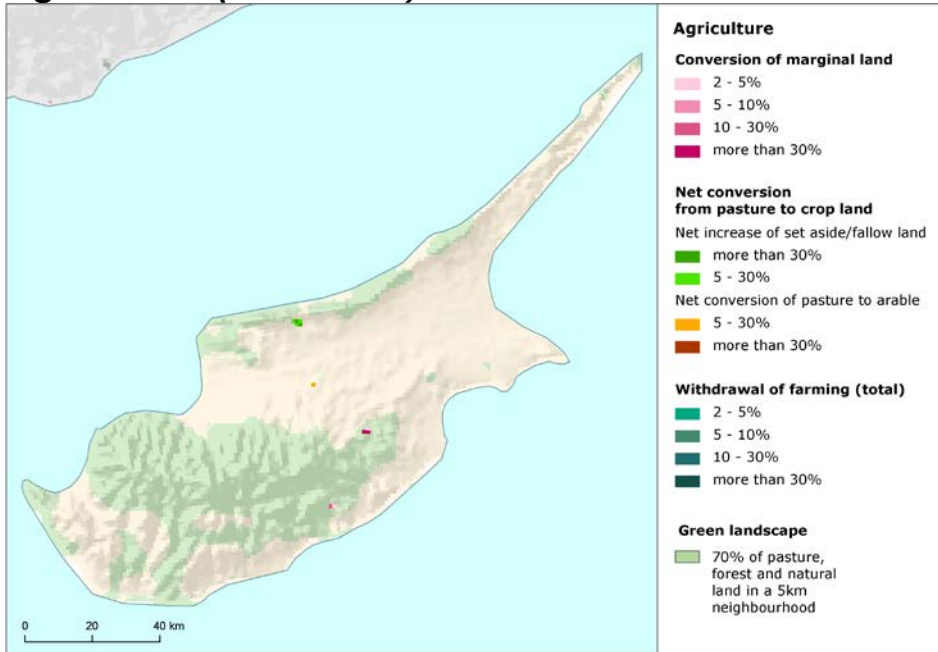
3.10. Artificial land take 2006-2012 [ha/year]



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



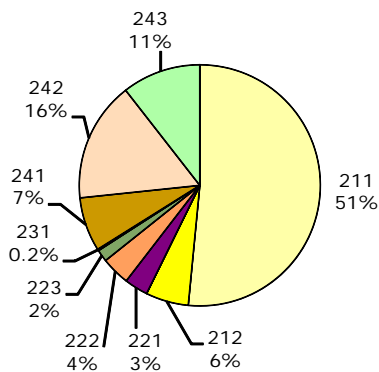
Agriculture (2006-2012)



Slowdown of agricultural conversions

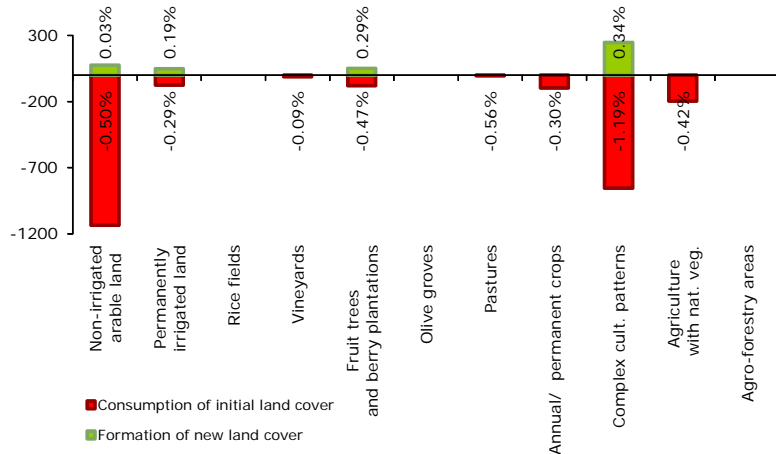
Development of agricultural land in Cyprus shows rapid decrease of intensity, compared to previous period. This is valid for both internal agricultural conversions and conversion from forested and natural land to agriculture, which were quite frequent in the period 2000-2006. Both arable and crop land and pasture show negative balance of net change, which is caused mainly by consumption of agricultural land through artificial land take, in particular construction. The rest of the agricultural flows, which were observable in the previous period, almost disappeared from the Cyprian landscape. It includes diffuse extension of set aside fallow land and pasture and diffuse conversion from permanent crops to arable land and, in particular, conversions from semi-natural land to agriculture, which were quite frequent in the previous period 2000-2006.

4.12. Agricultural areas 2012 [% of total area]

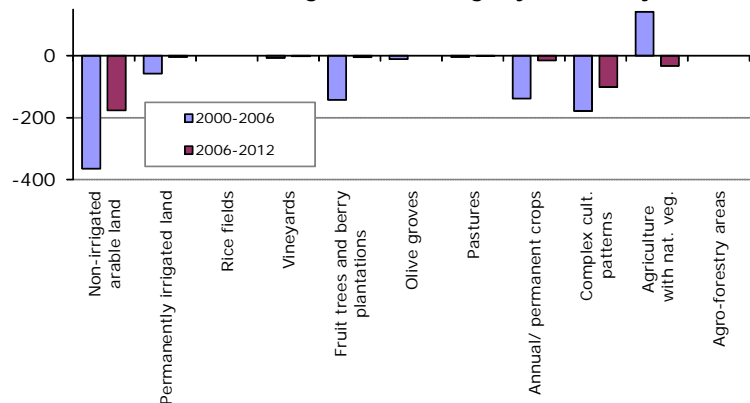


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas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

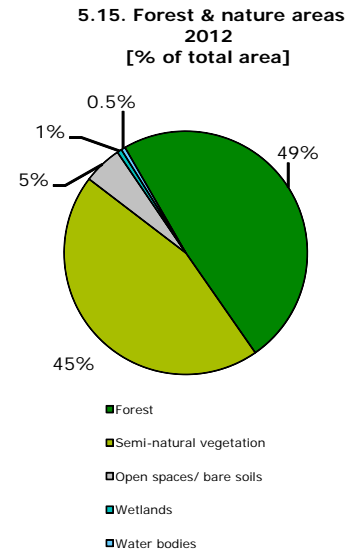
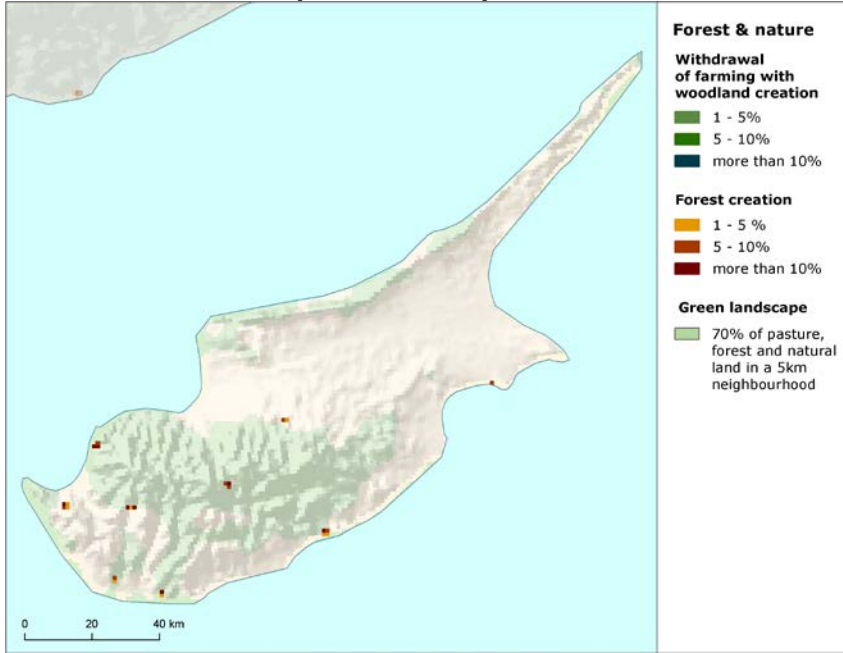
4.13. Development of agricultural areas 2006-2012 – detailed balance [ha]



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

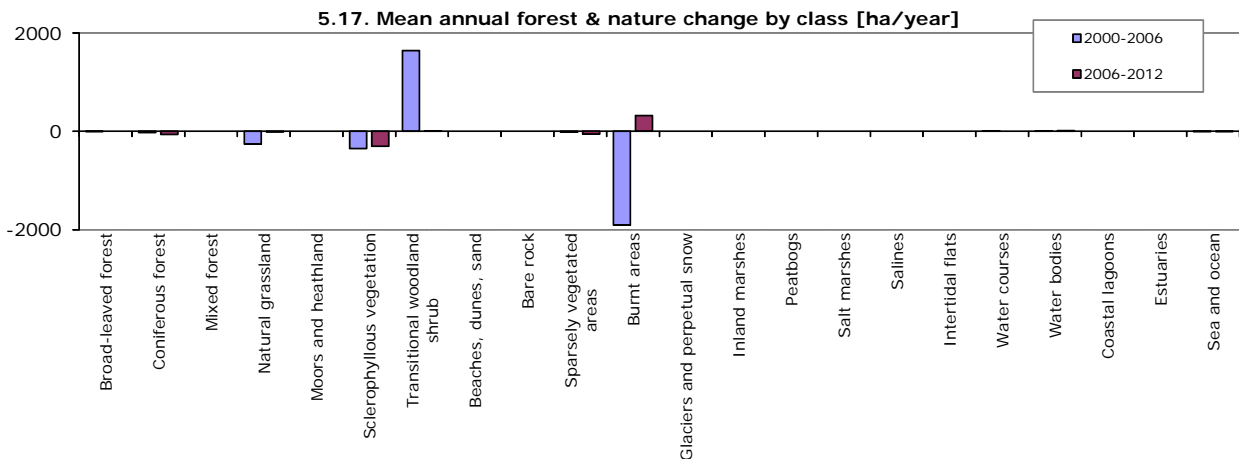
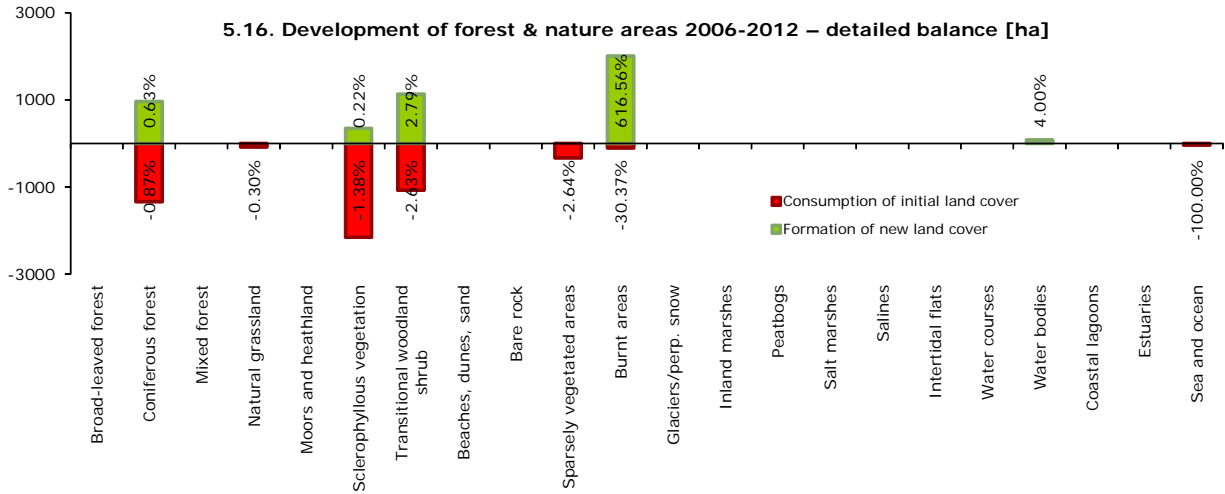


Forest & nature (2006-2012)



Shrub fires back again

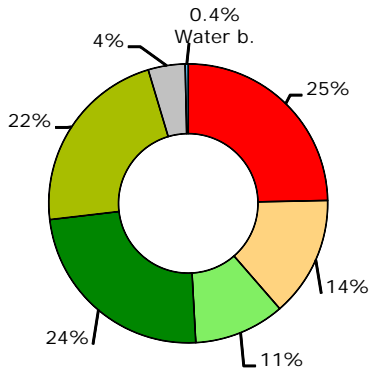
The pace of development of natural landscape is much slower than in the previous period 2000-2006 and the overall intensity is very low. Forest creation and management (represented mostly by afforestation of burnt areas in Cyprus), which was the most powerful change driver before, lost most of its intensity. On the other hand, there newly occurs certain amount of internal forest conversions between forest and transitional woodland (in both directions) and also forests and shrubs fires returned to the Cyprian landscape in the period 2006-2012, which mainly consumed natural grassland or sclerophyllous vegetation.



Annex: Land cover flows and trends

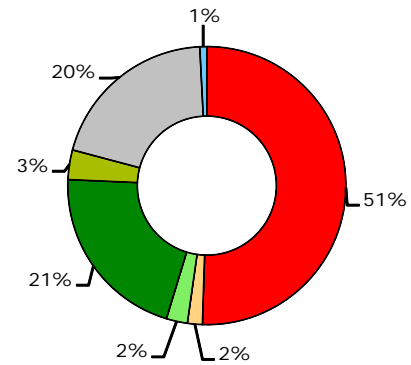
Land cover flows 2006-2012

6.18. Consumption of land cover 2006-2012 [% of total change area]

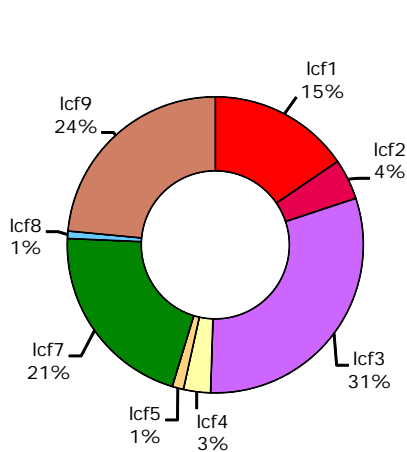


- Artificial areas
- Arable land & permanent crops
- Pastures & mosaics
- Forested land
- Semi-natural vegetation
- Open spaces/bare soils
- Wetlands
- Water bodies

6.19. Formation of land cover 2006-2012 [% of total change area]



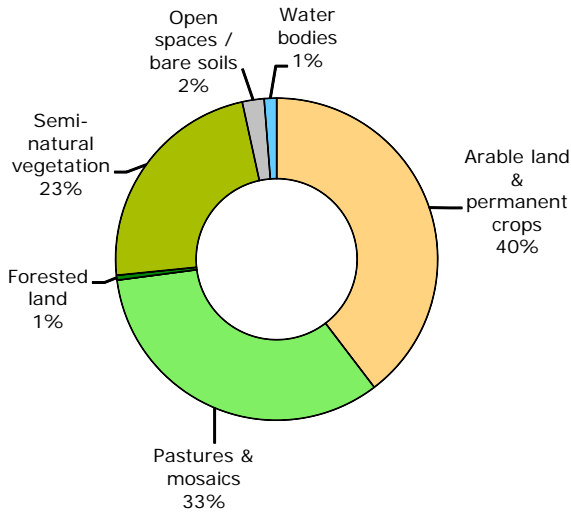
6.20. Drivers of change (LC FLOWS) 2006-2012 [% of total change area]



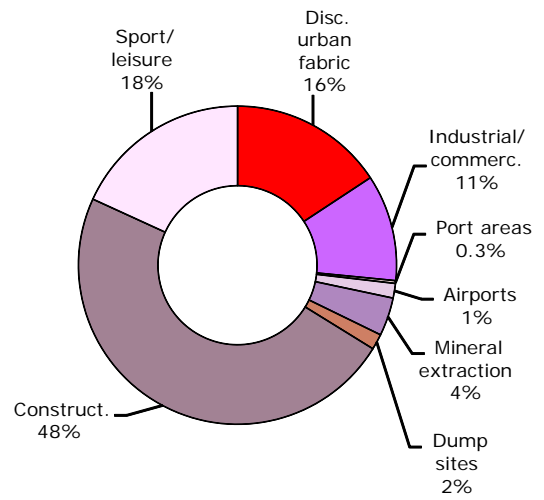
- Icf1 Urban land management
- Icf2 Urban residential sprawl
- Icf3 Sprawl of economic sites and infrastructures
- Icf4 Agriculture internal conversions
- Icf5 Conversion from forested & natural land to agriculture
- Icf6 Withdrawal of farming
- Icf7 Forests creation and management
- Icf8 Water bodies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

Artificial areas

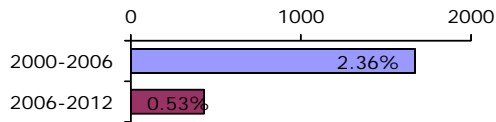
7.21. Consumption by artificial land take 2006-2012 [% of total]



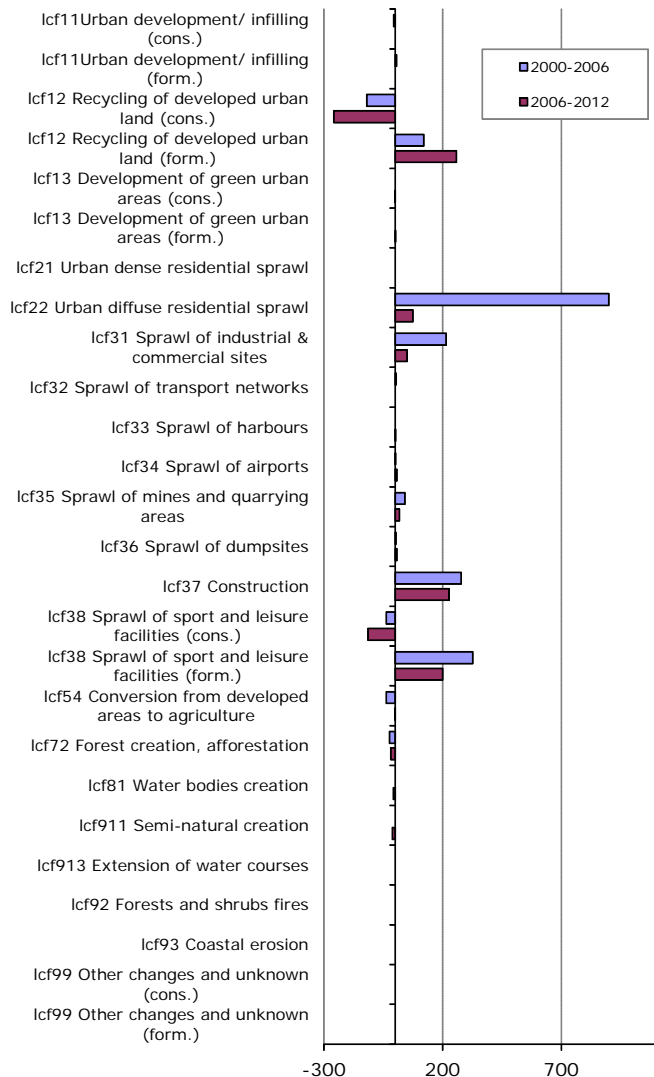
7.22. Formation by artificial land take 2006-2012 [% of total]



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

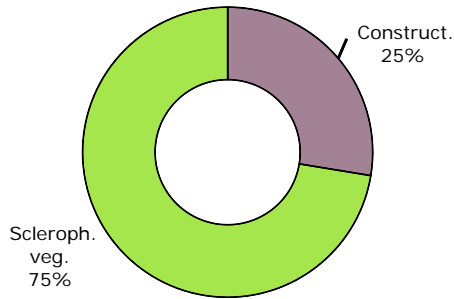


7.24. Artificial development by change drivers (LC FLOWS) [ha/year]

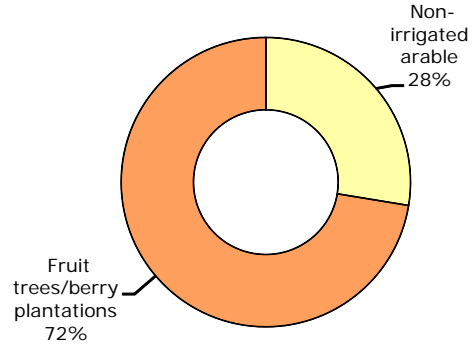


Agriculture

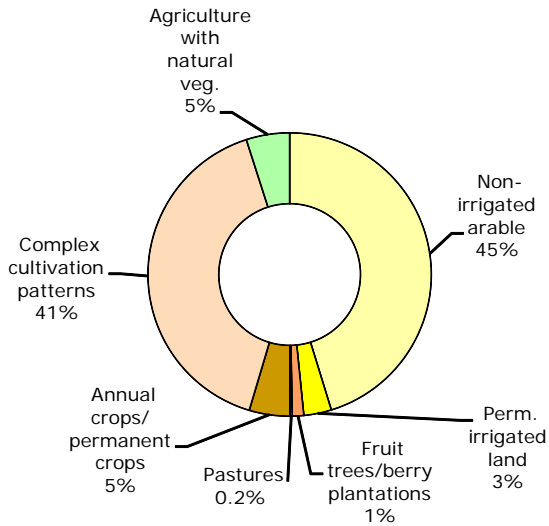
8.25. LC consumed by agriculture 2006-2012 [% of total]



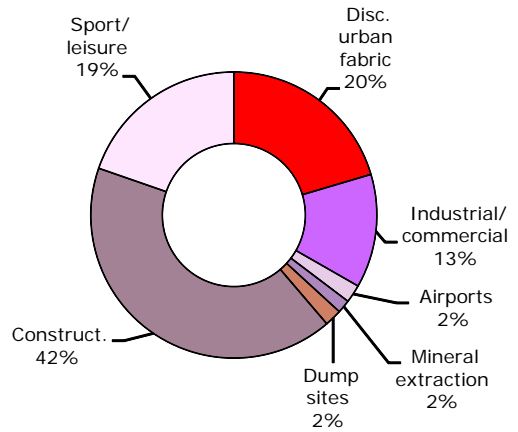
8.26. Formation of agricultural land from non-agriculture 2006-2012 [% of total]



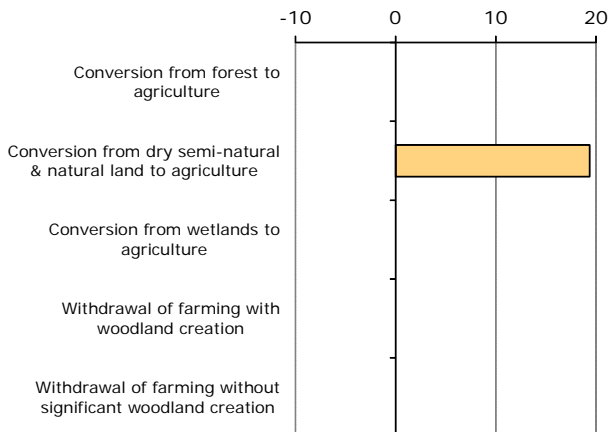
8.27. Consumption of agricultural land by non-agriculture 2006-2012 [% of total]



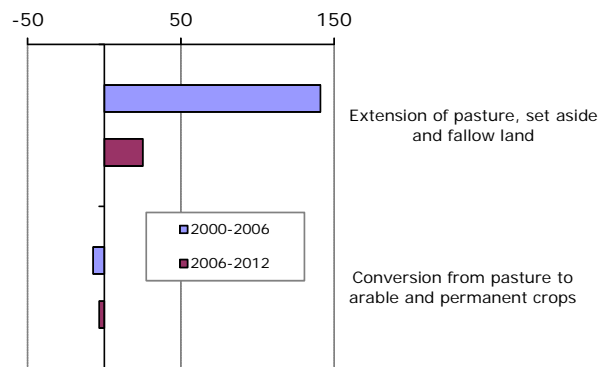
8.28. Formation of non-agricultural land from agriculture 2006-2012 [% of total]



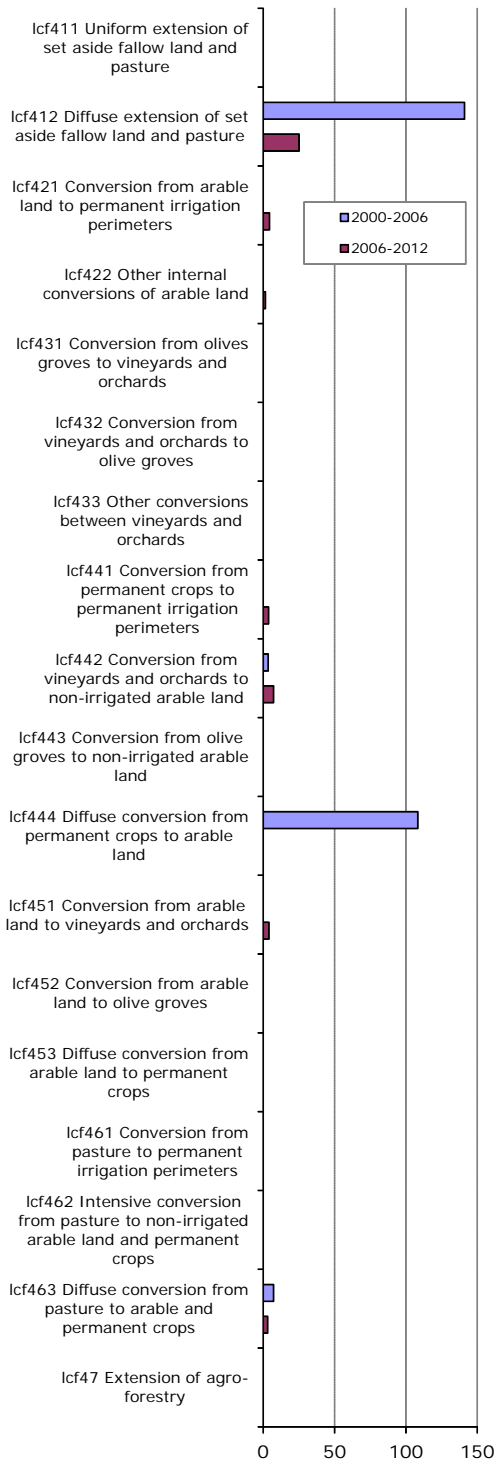
8.29. Main annual conversions between agriculture and forests & semi-natural land 2006-2012 [ha/year]



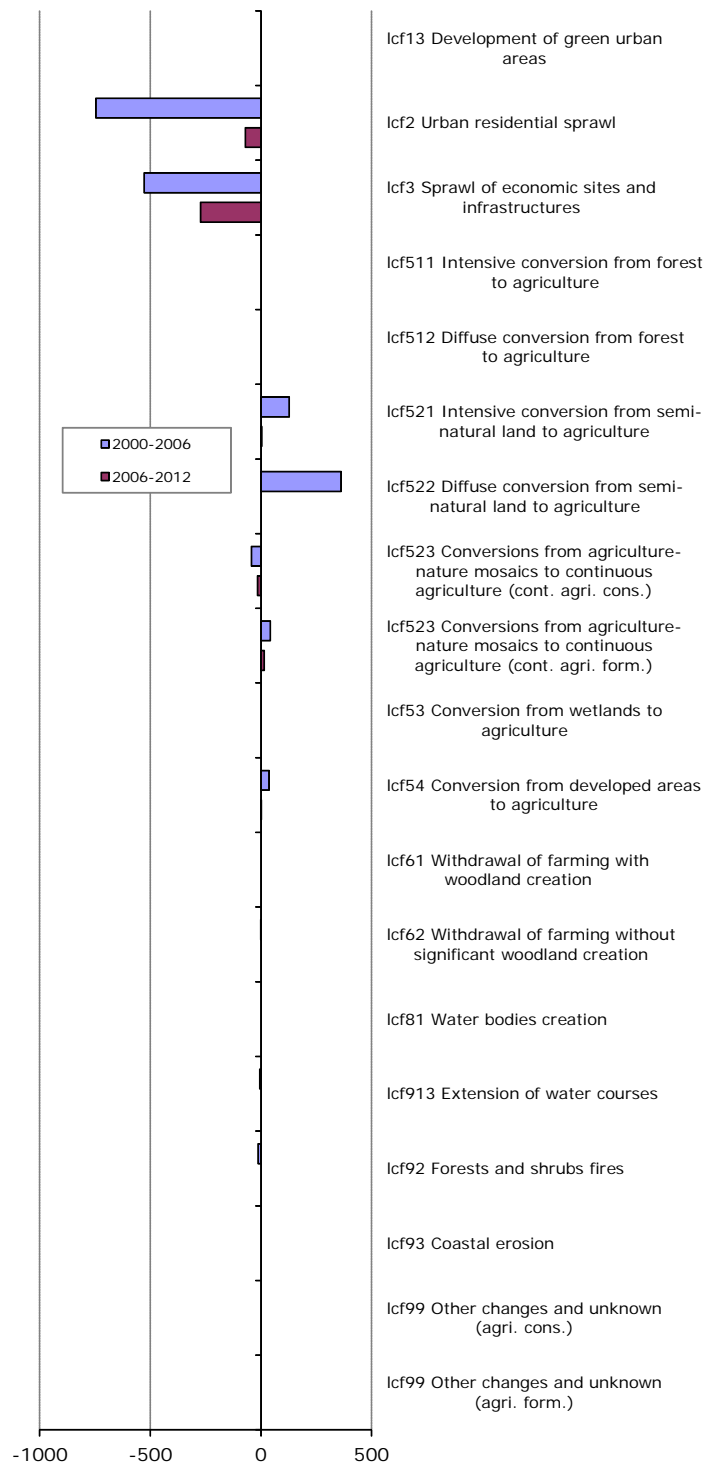
8.30. Mean annual conversion between arable land and pasture [ha/year]



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

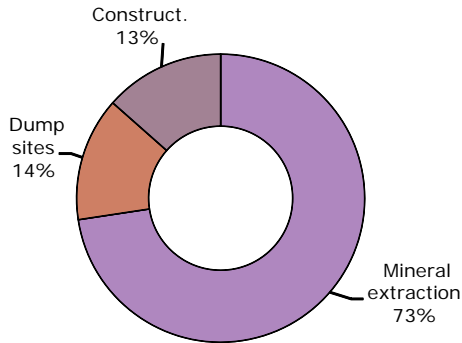


9.32. Mean annual conversions between agriculture and other LC types [ha/year]

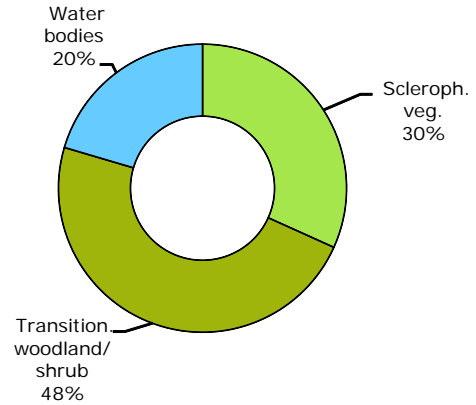


Forest & nature

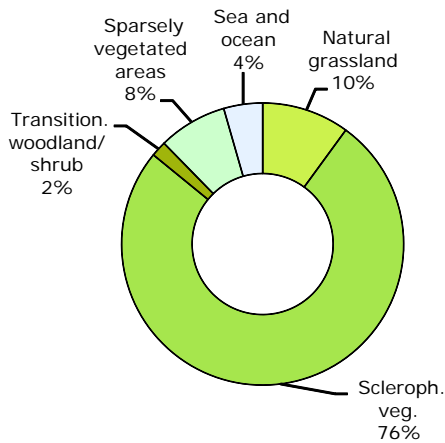
10.33. LC consumed by forest & nature 2006-2012 [% of total]



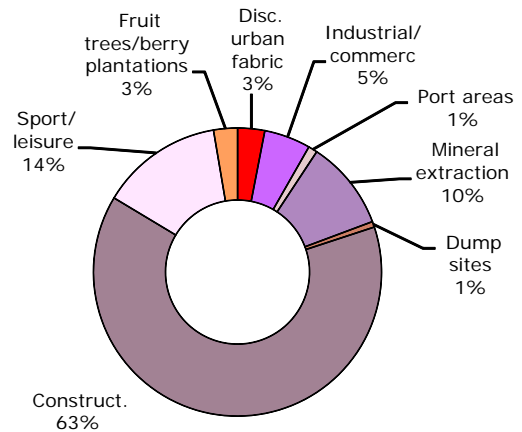
10.34. Formation of forest & nature land from non-forest /nature 2006-2012 [% of total]



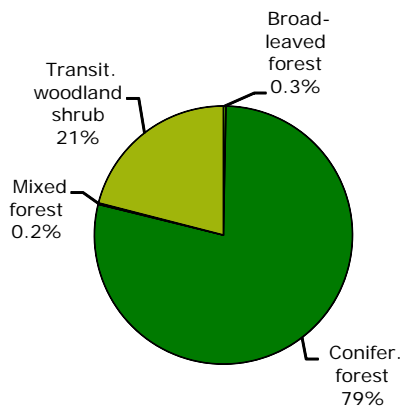
10.35. Consumption of forest & nature land by non-forest/nature 2006-2012 [% of total]



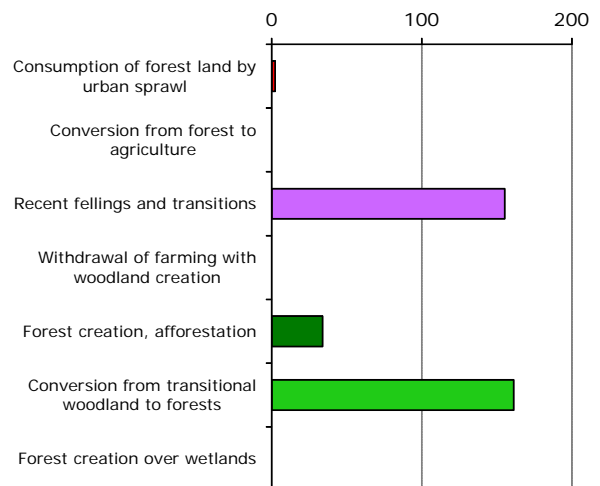
10.36. Formation of non-forest/nature land from forest & nature 2006-2012 [% of total]



10.37. Forested land 2012 [% of total area]

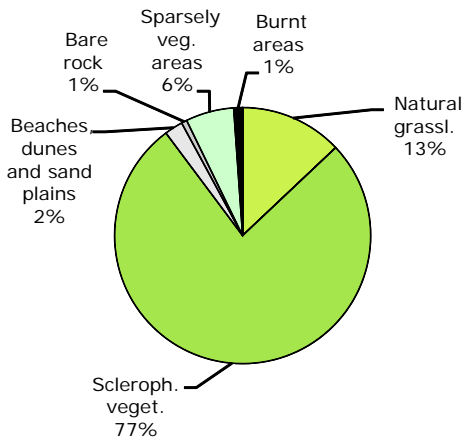


10.38. Main trends in woodland & forests consumption/formation 2006-2012 [ha/year]

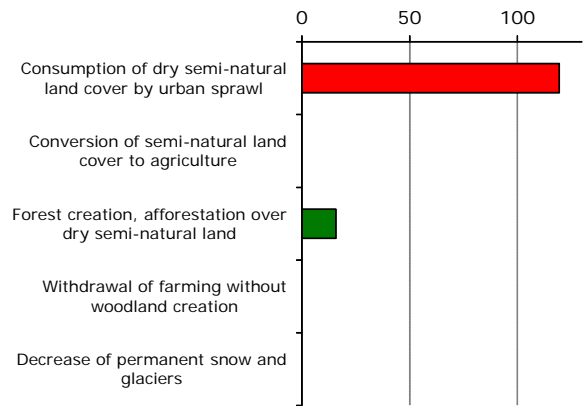


Cyprus

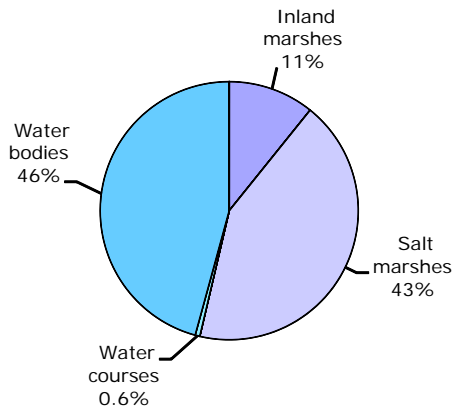
11.39. Dry semi-natural areas 2012
[% of total area]



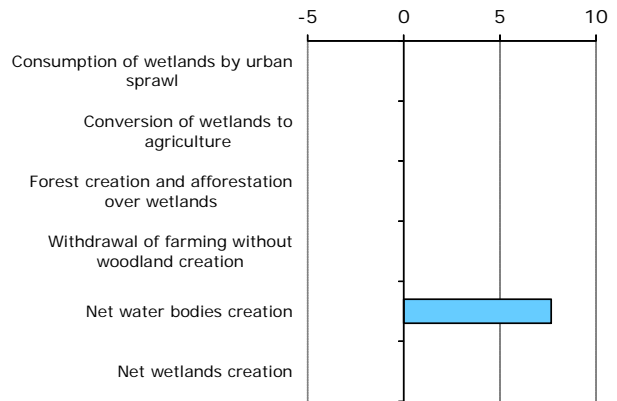
11.40. Main trends in dry semi-natural land consumption/formation 2006-2012
[ha/year]



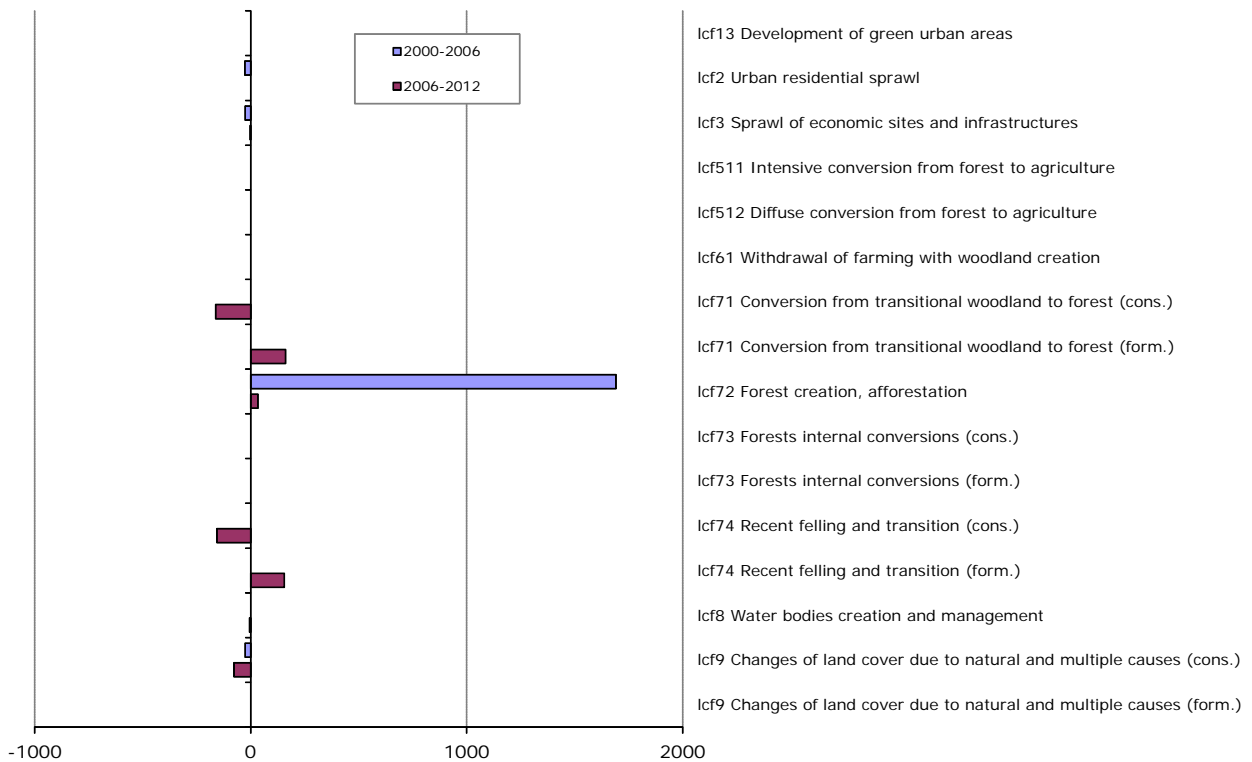
11.41. Wetlands & water 2012
[% of total area]



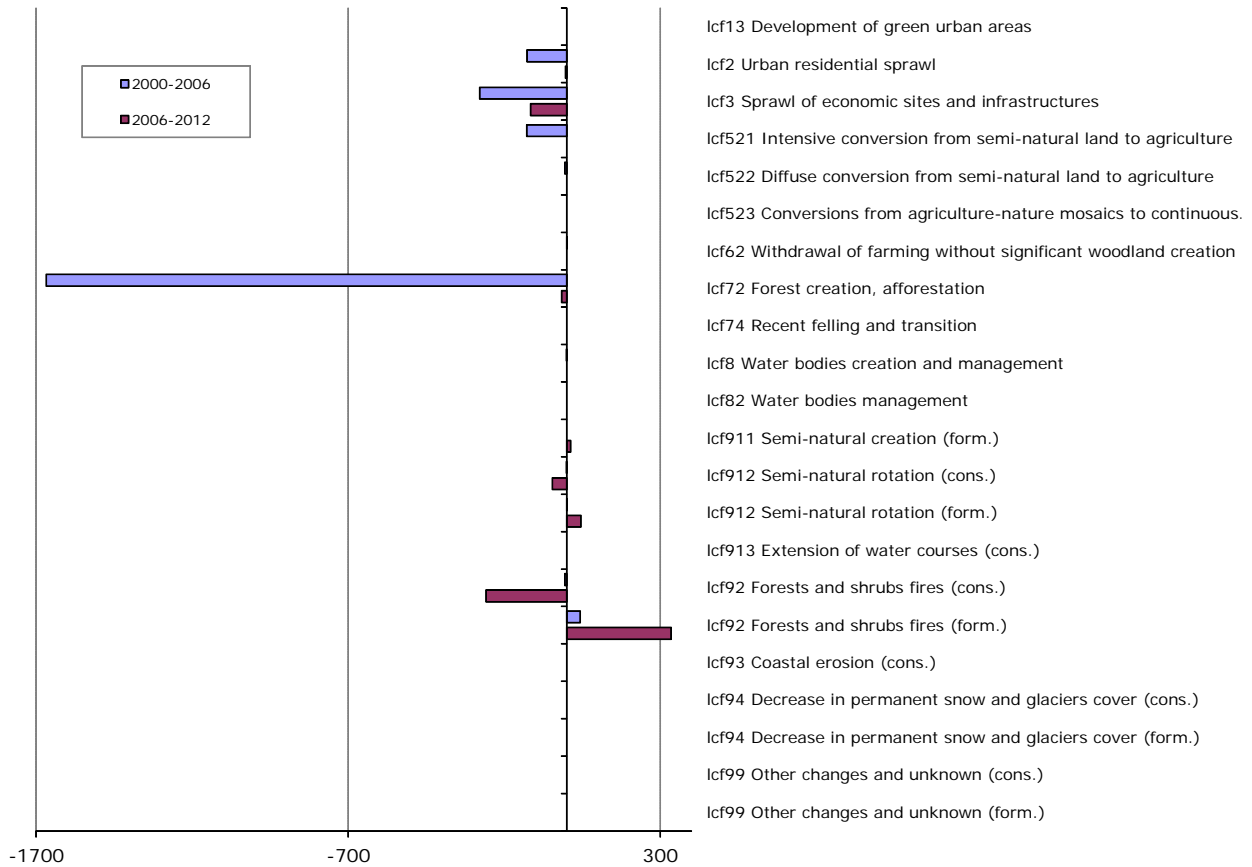
11.42. Main trends in wetlands & water consumption/formation 2006-2012
[ha/year]



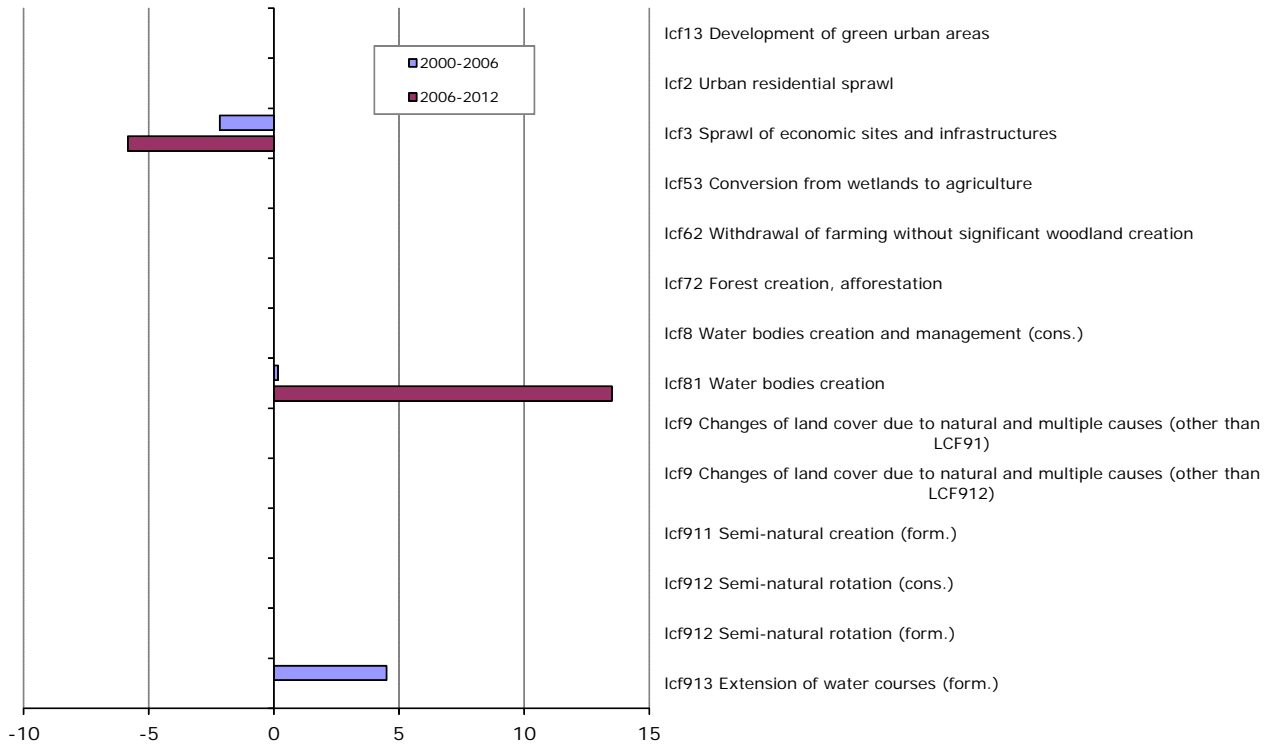
11.43. Mean annual conversions of forest & other woodland
[ha/year]



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

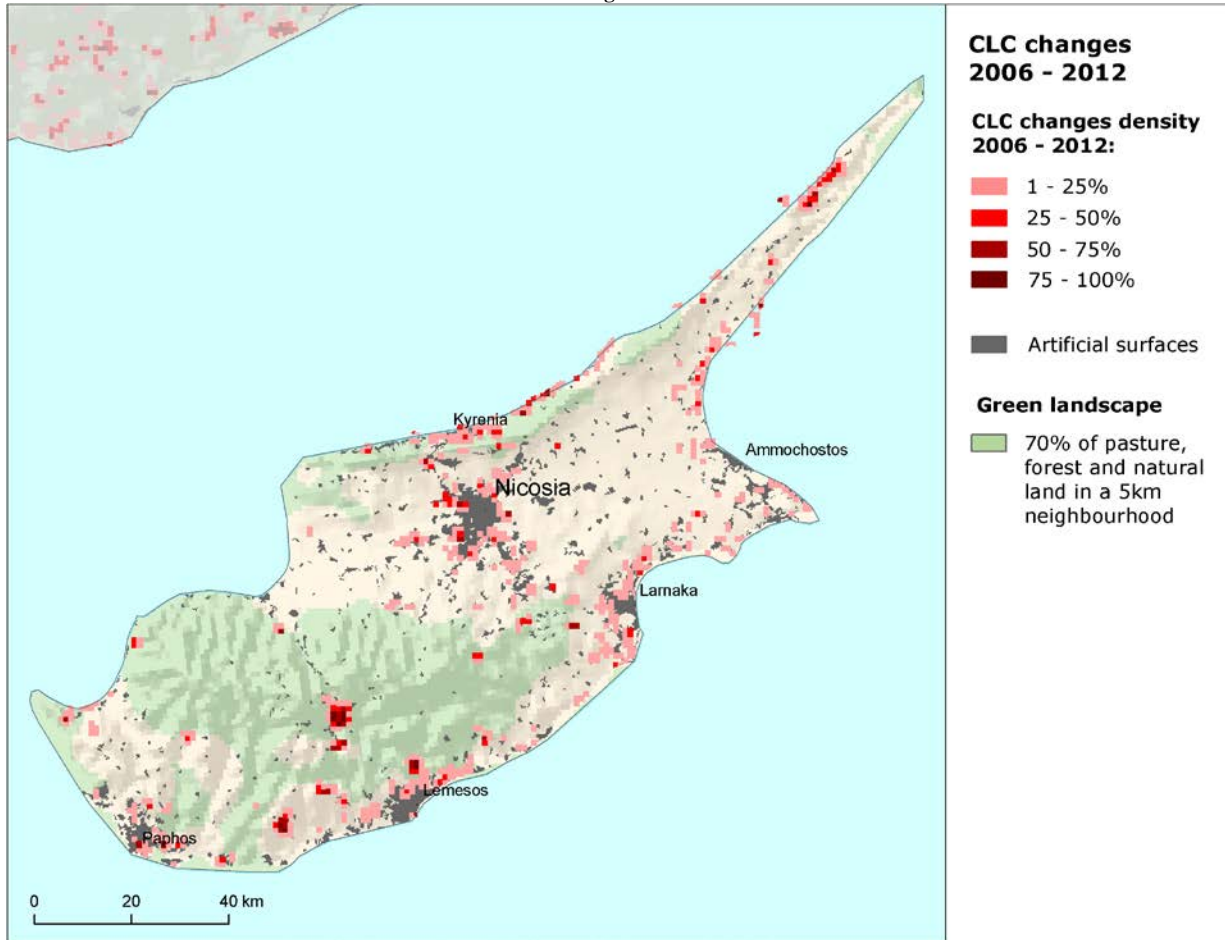


12.45. Mean annual conversions of wetlands and water LC [ha/year]

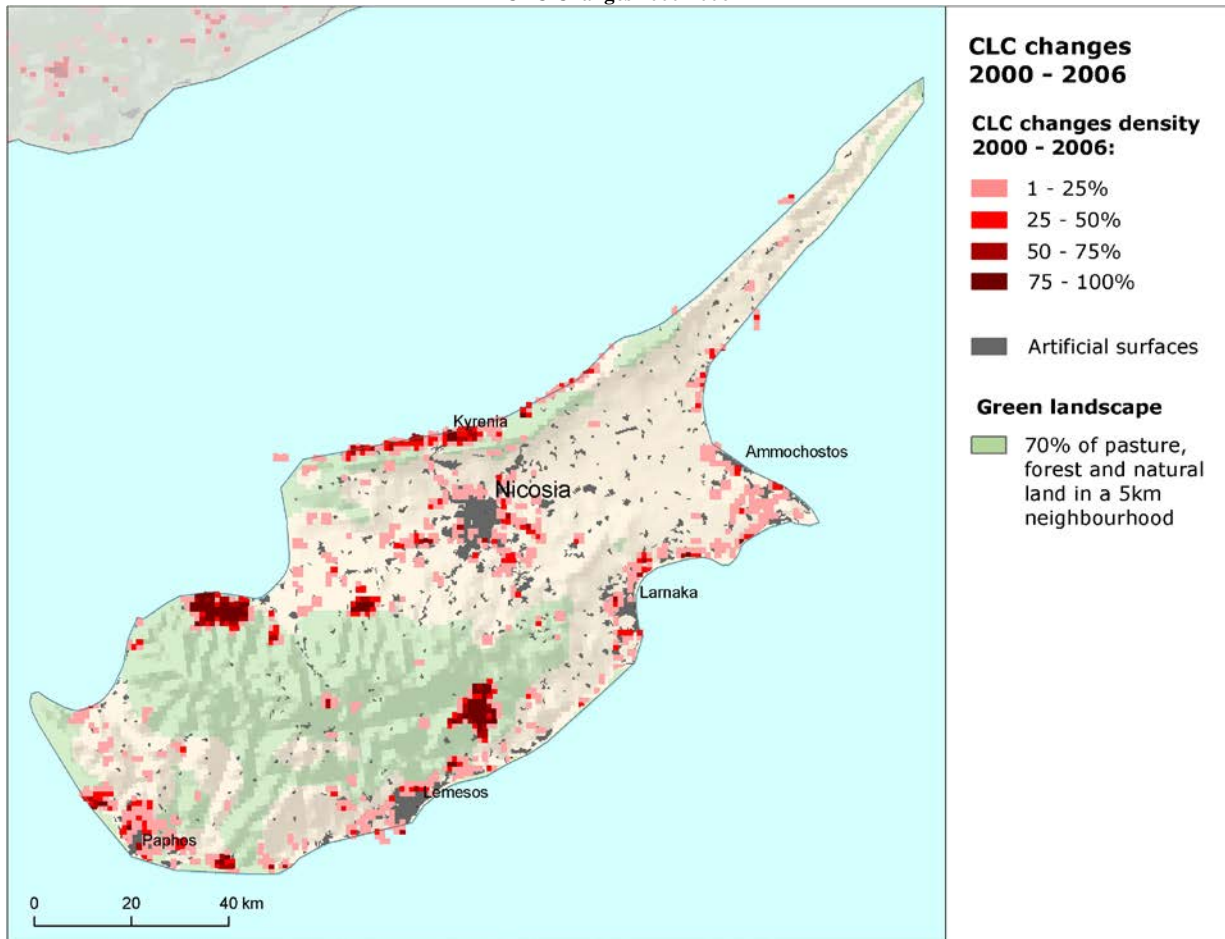


Cyprus

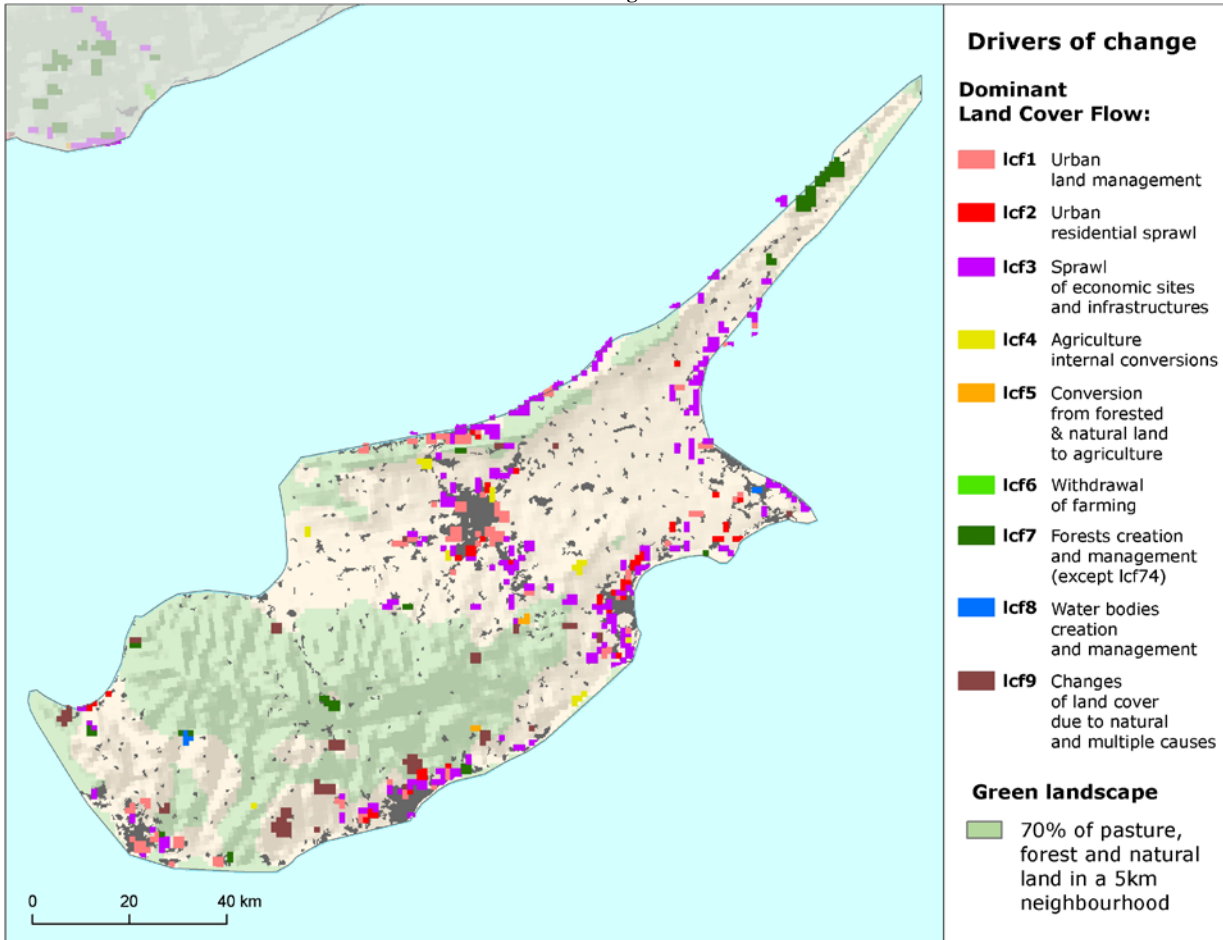
CLC Changes 2006-2012



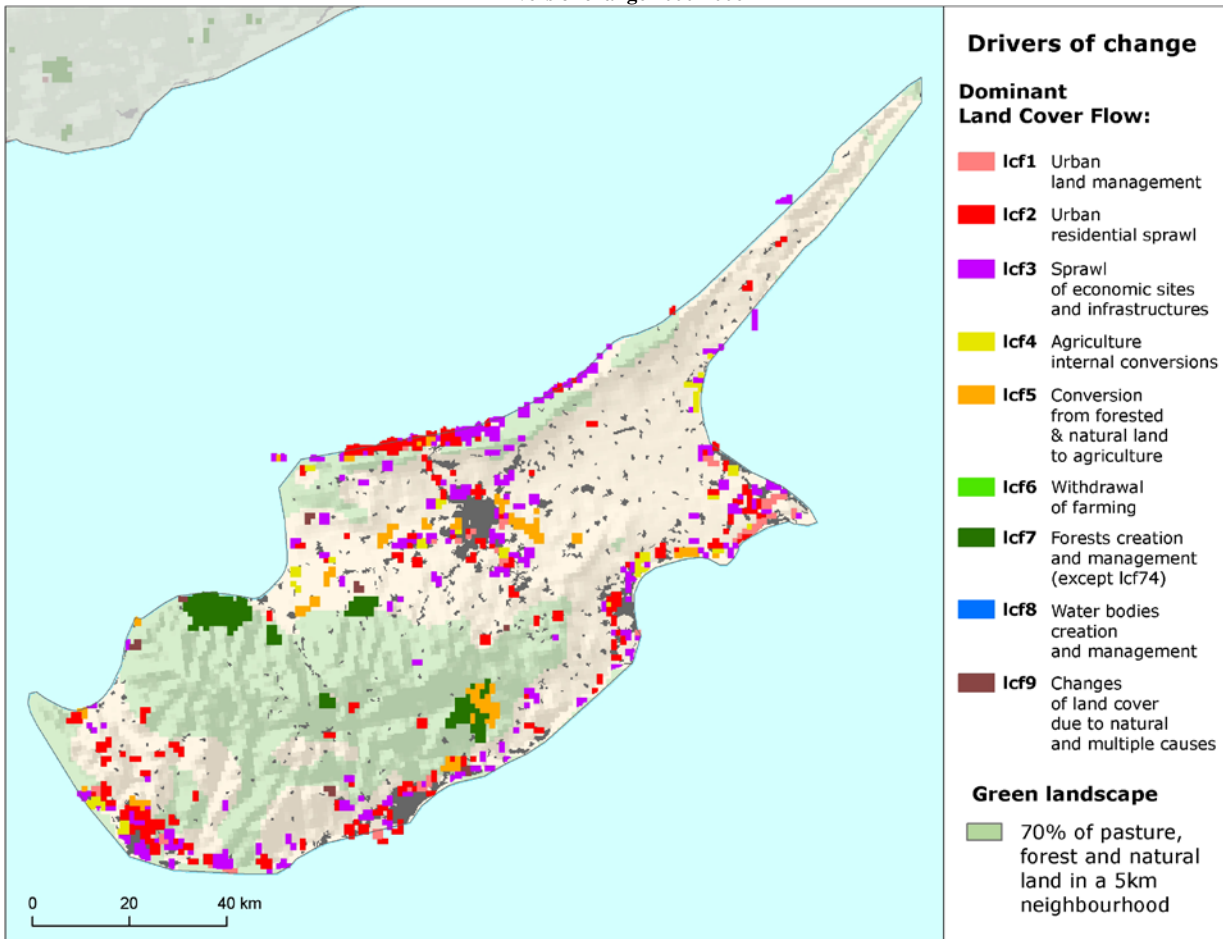
CLC Changes 2000-2006



Drivers of change 2006-2012

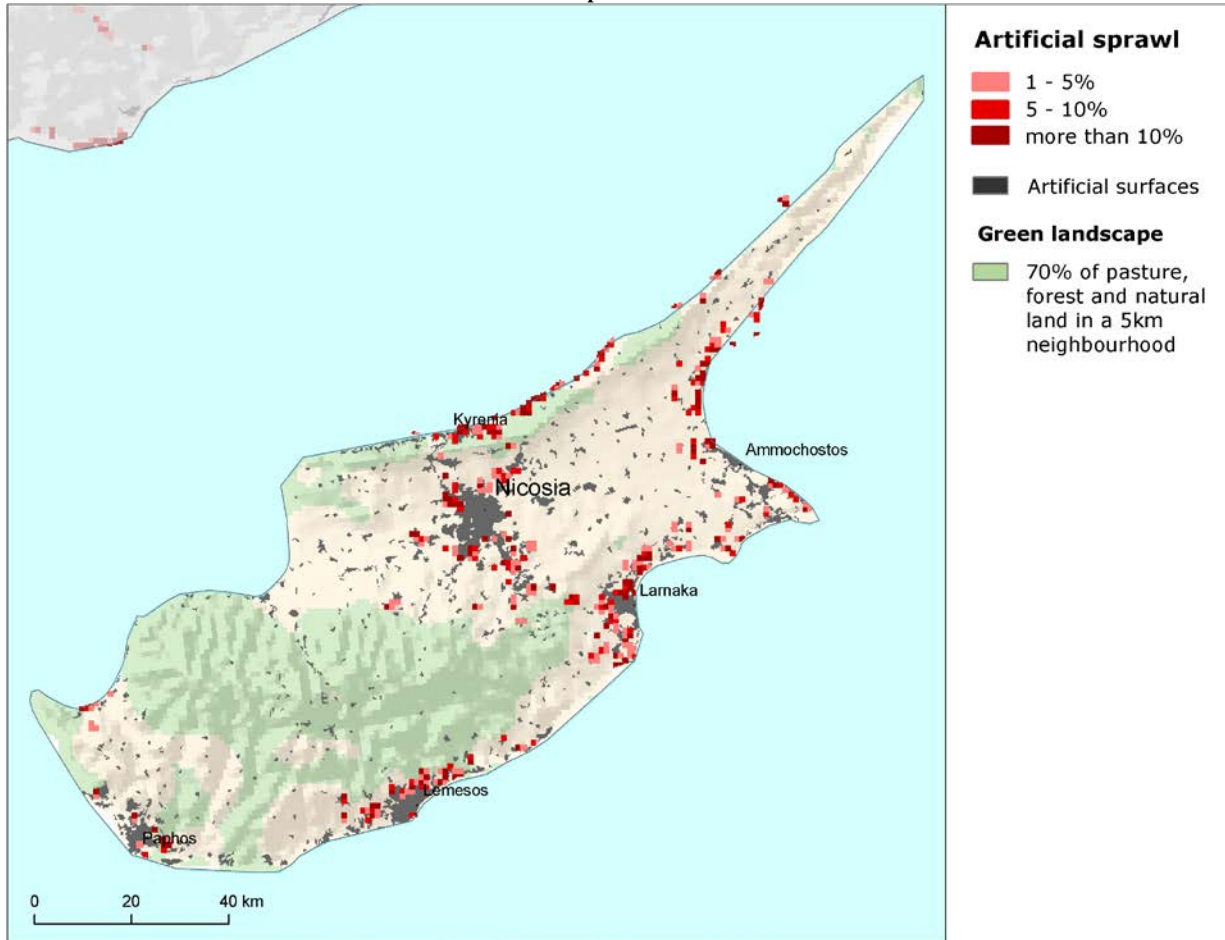


Drivers of change 2000-2006

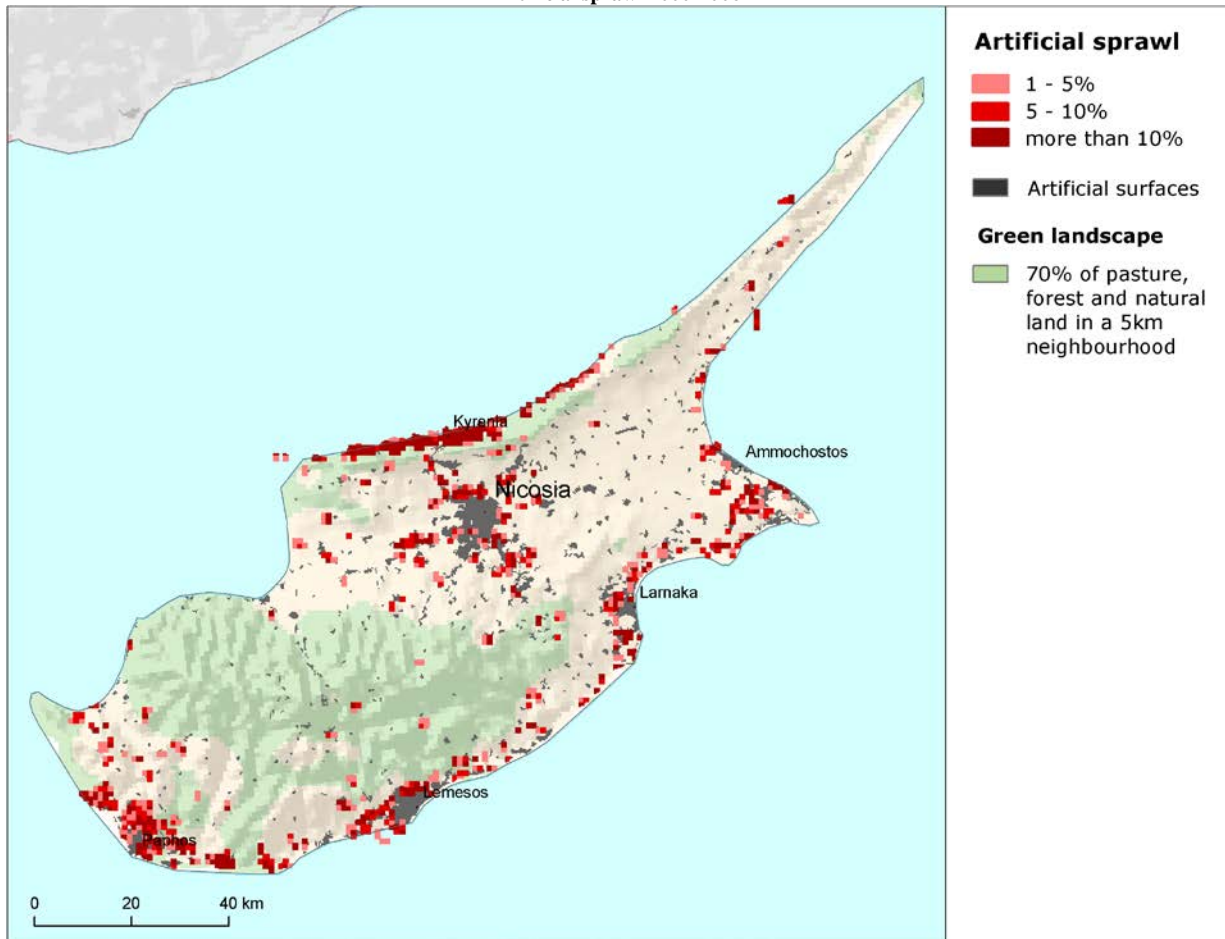


Cyprus

Artificial sprawl 2006-2012

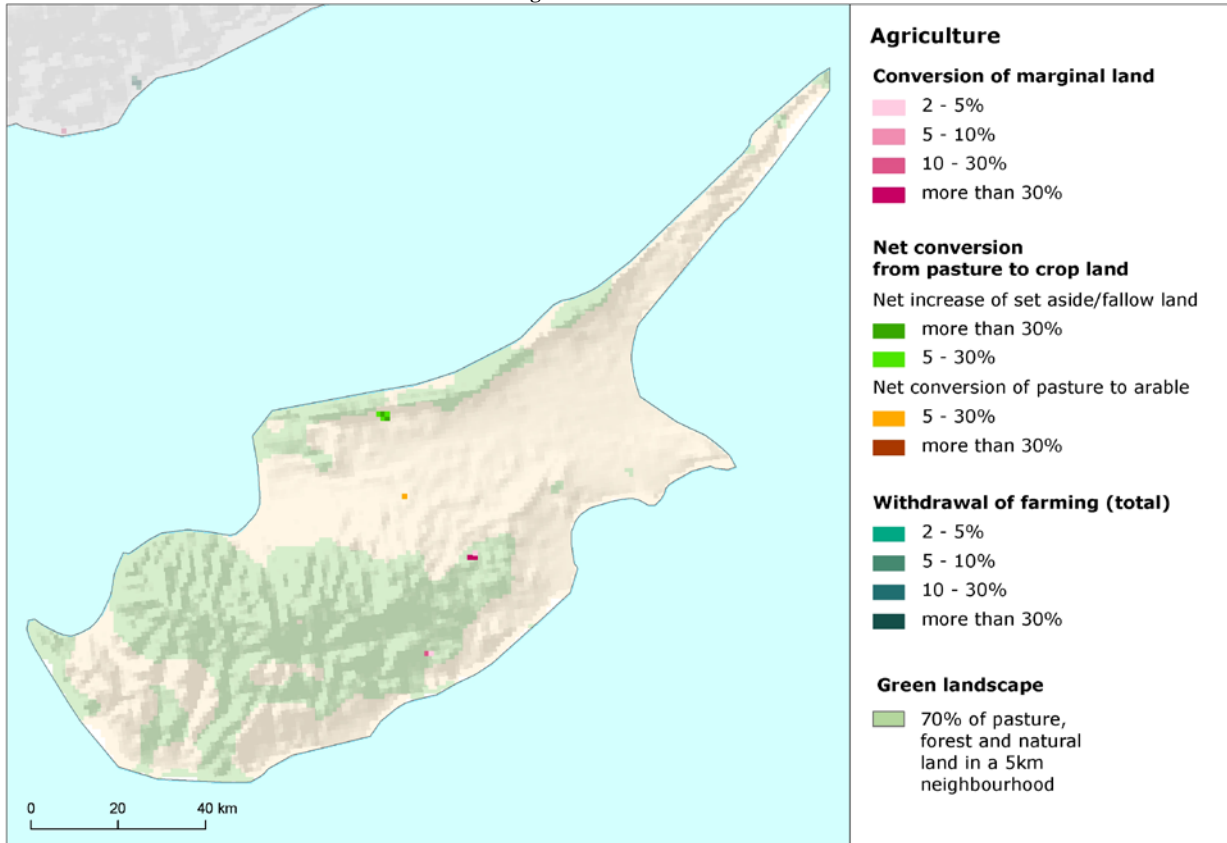


Artificial sprawl 2000-2006

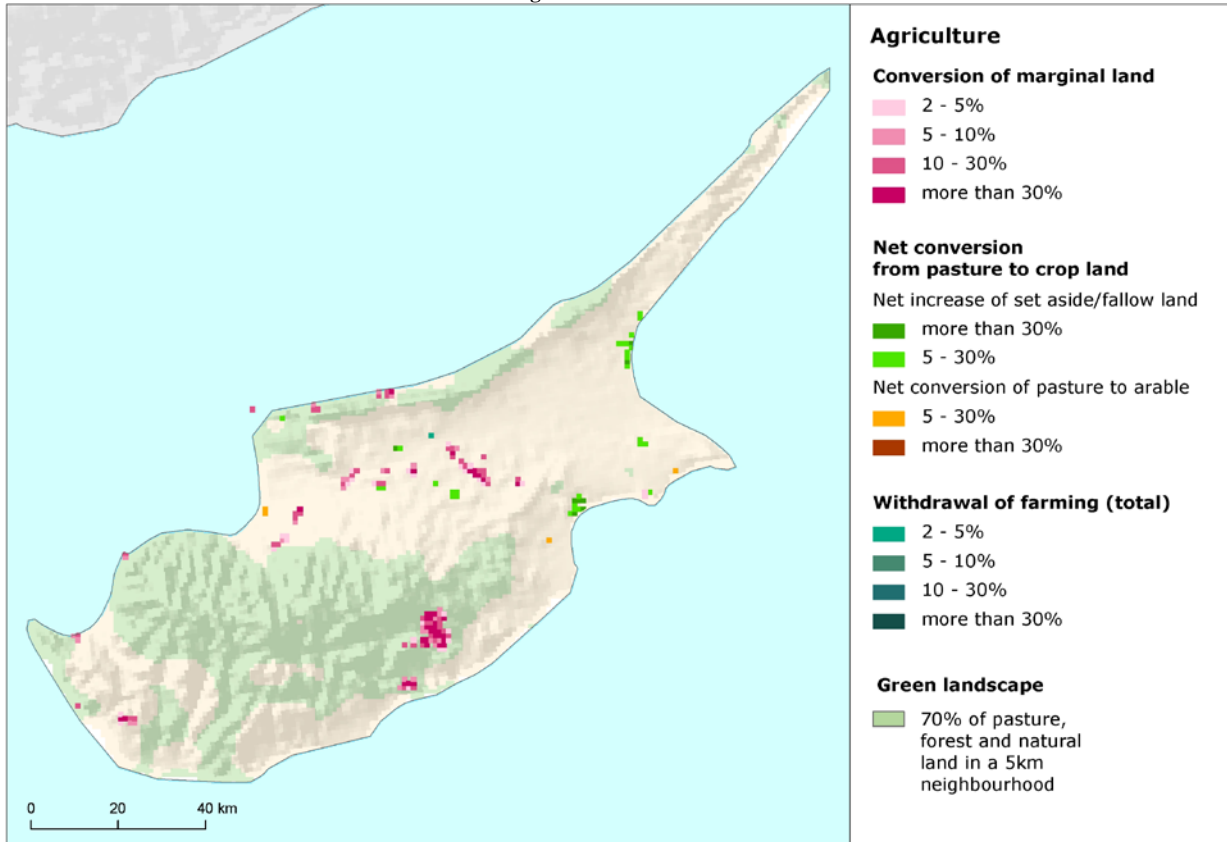


Cyprus

Agriculture 2006-2012

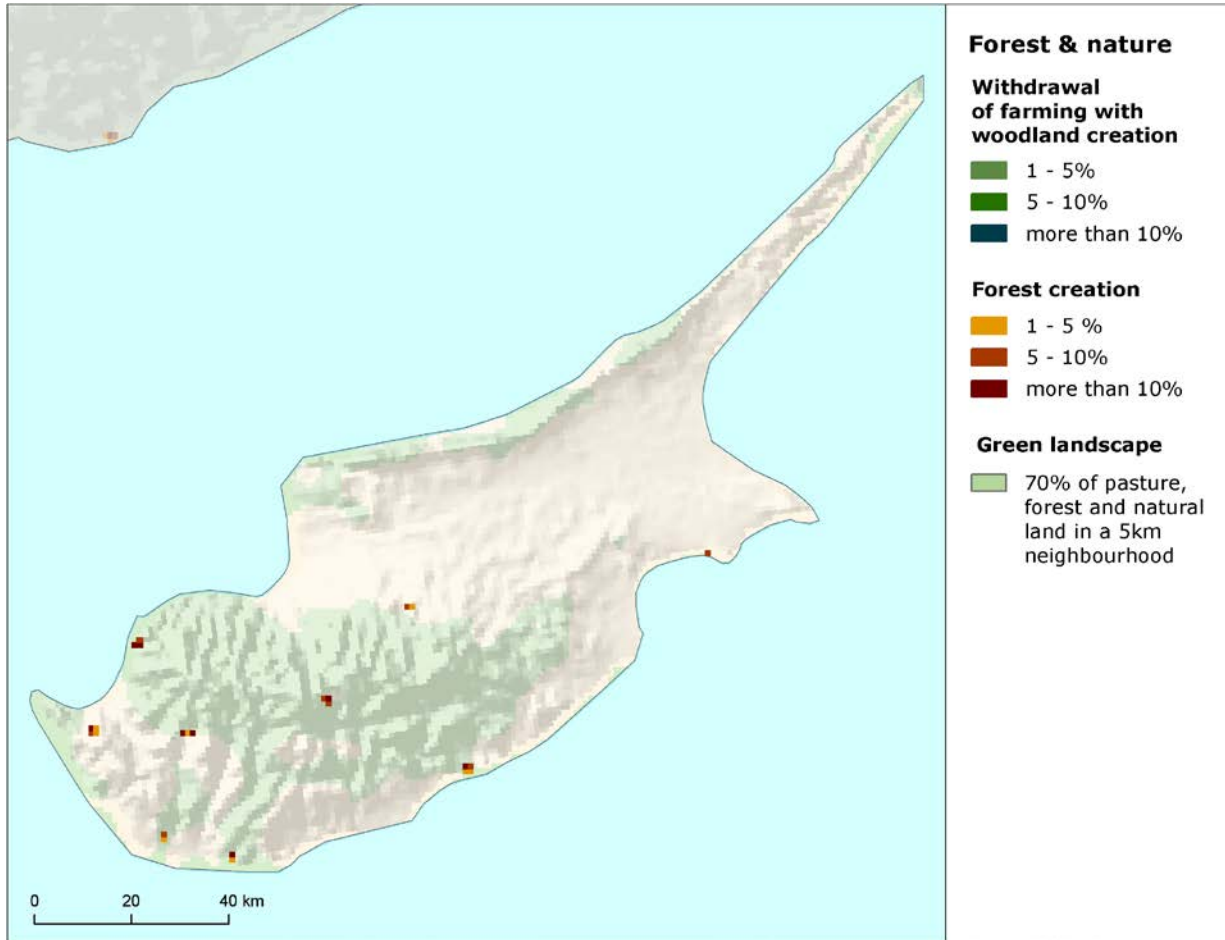


Agriculture 2000-2006



Cyprus

Forest and nature 2006-2012



Forest and nature 2000-2006

