

Land cover 2012



Liechtenstein

September 2017

Photo: © Toni García, My City/EEA

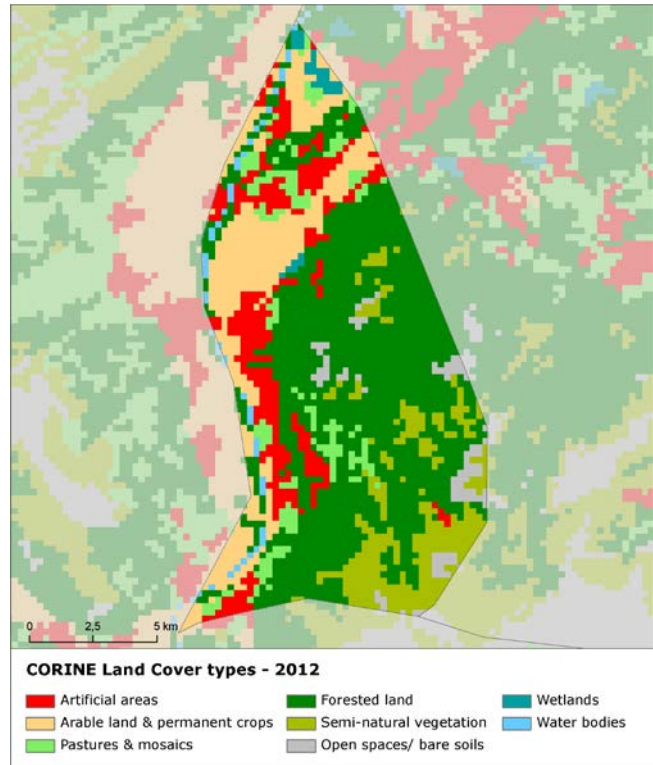


Liechtenstein

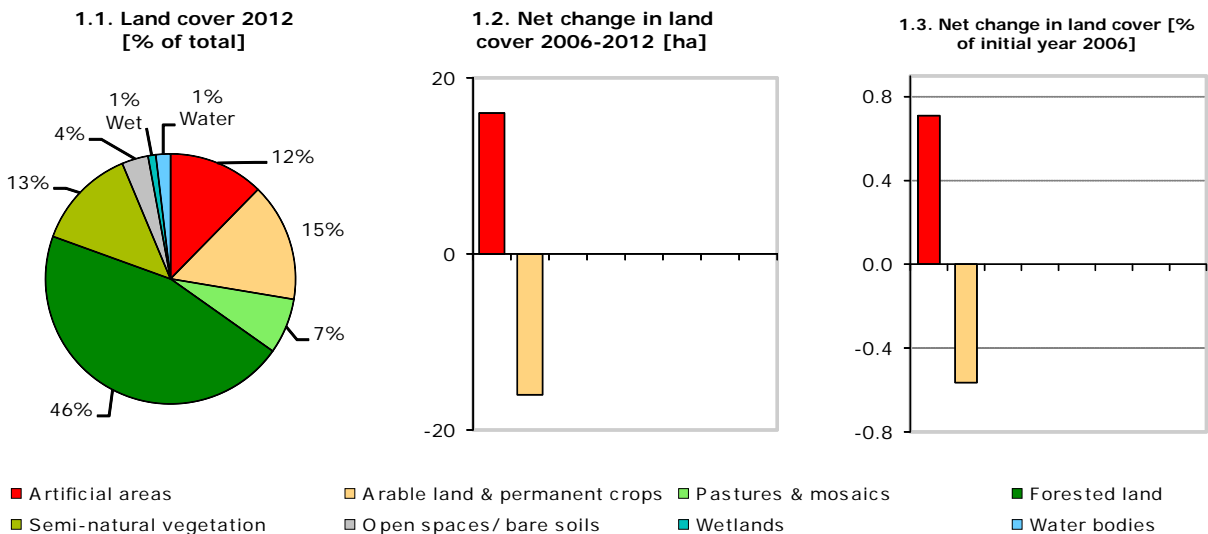
Land cover 2012

Overview of land cover & change 2006-2012

As in previous periods, the land cover development in the small country of Liechtenstein has been very limited. However, in the period 2006-2012, there occurs some amount of land cover change, namely artificial land take at the north of the capital city Vaduz.



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 Liechtenstein: 6

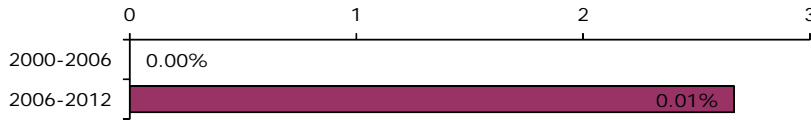


Summary balance table 2006-2012

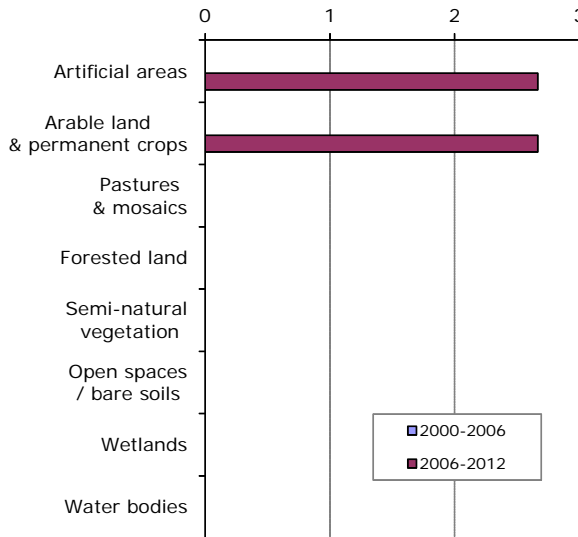
	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
Land cover 2006	23	28	13	84	24	6	2	3	184
Consumption of initial LC	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Formation of new LC	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Net Formation of LC	0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Net formation as % of initial year	0.7	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total turnover of LC	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Total turnover as % of initial year	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Land cover 2012	23	28	13	84	24	6	2	3	184

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

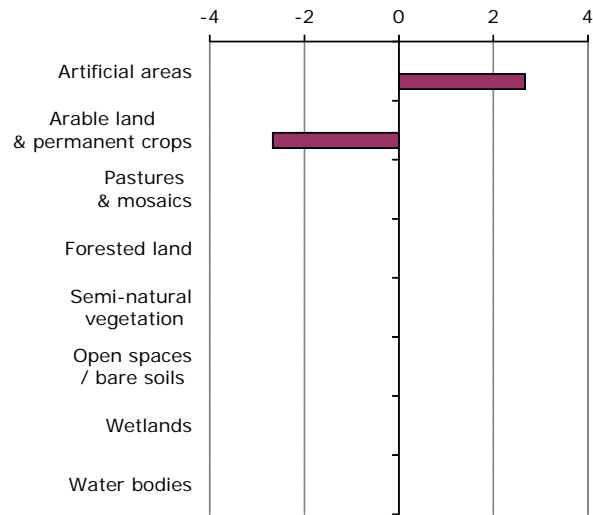
2.4. Annual land cover change
[ha/year, % of total area]



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

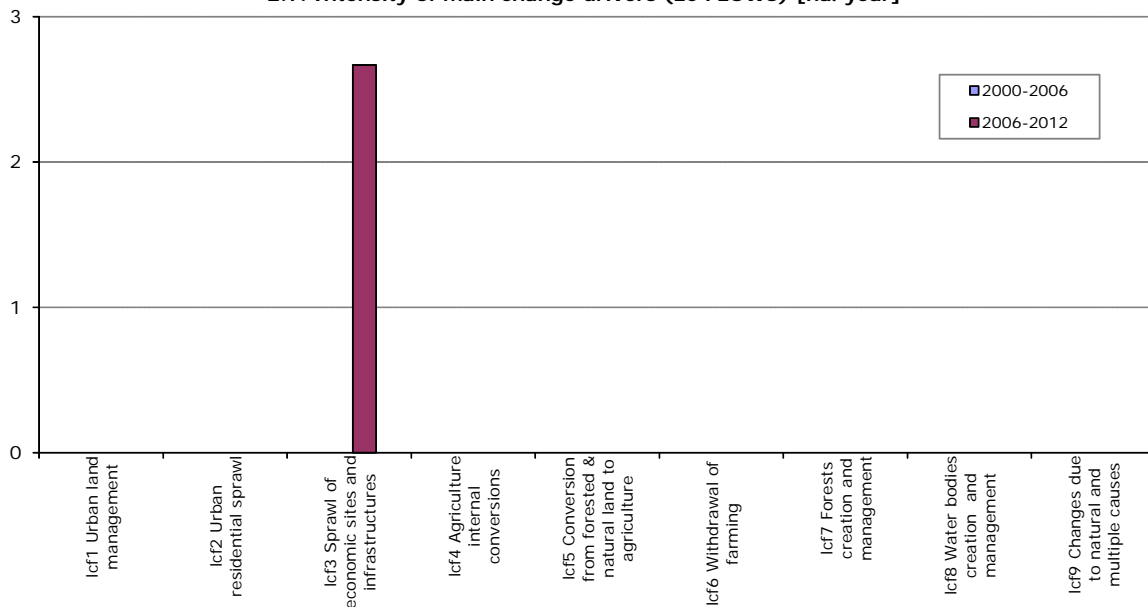


2.6. Net annual change of LC types [ha/year]

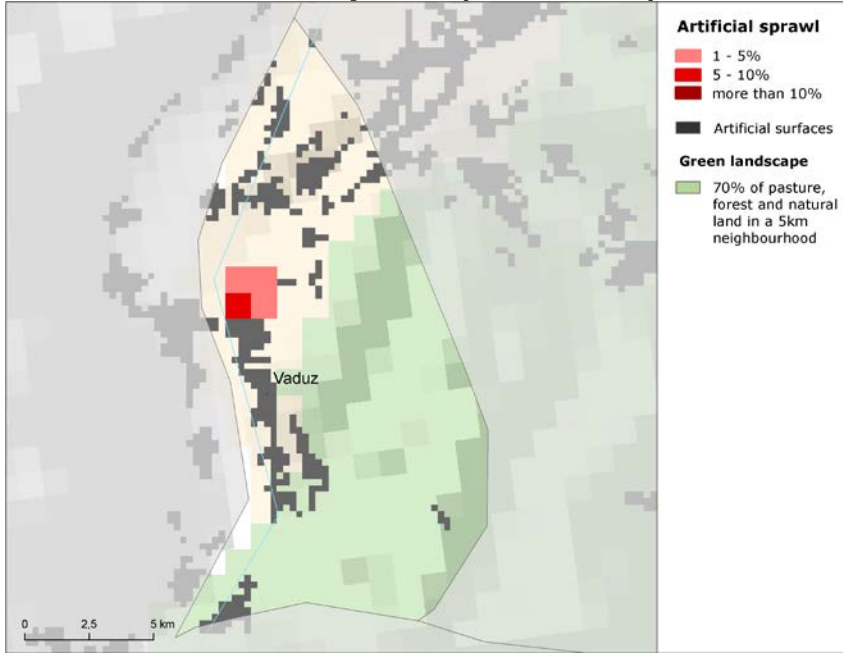


Summary trend figures		
	2000-2006	2006-2012
Annual land cover change [ha/year]	0	3
Annual land cover change as % of initial year	0.00%	0.01%
Land uptake by artificial development as mean annual change [ha/year]	0	3
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	0	3
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]	0	0
Wetlands & water bodies net formation as mean annual change [ha/year]	0	0

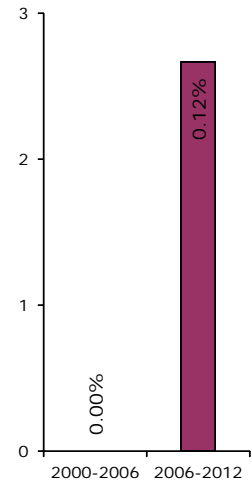
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



Artificial surfaces sprawl (2006-2012)



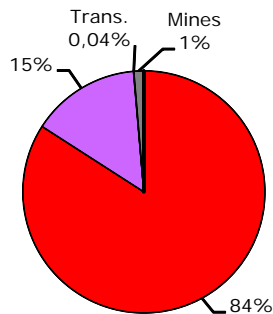
3.8. Artificial land take [ha/year, % of initial year]



Commercial/industrial development north of Vaduz

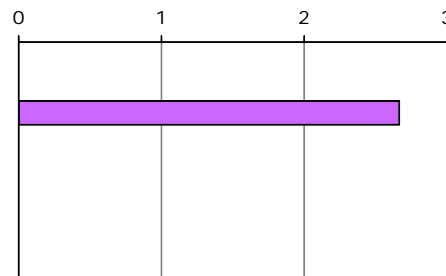
Artificial land take, which occurs north of the capital city Vaduz, is the only land cover change in the country during the period 2006-2012. This sprawl is represented by extension of industrial or commercial units over former non-irrigated arable land. This is in contrast with the previous period, when no artificial sprawl at all was observed.

3.9. Artificial surfaces 2012 [% of total area]

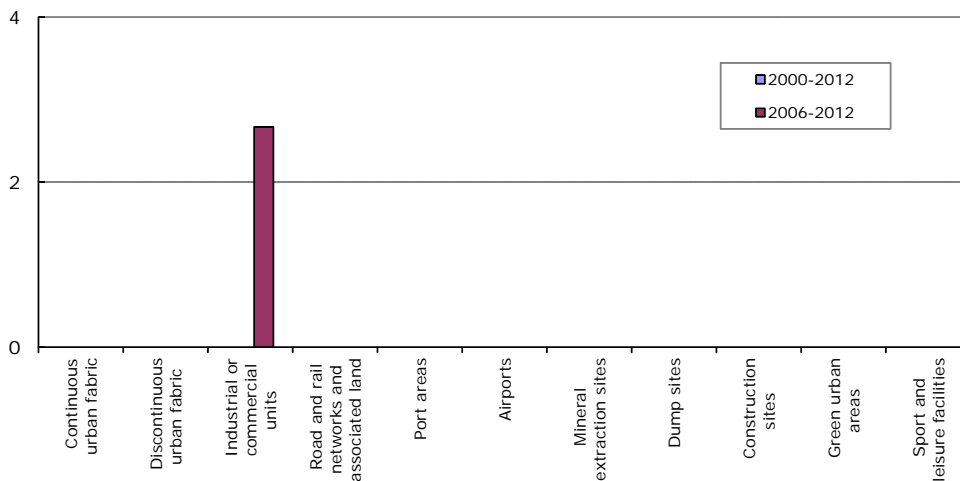


- Housing, services, recreation
- Industrial, commercial units
- Transport networks, infrastructures
- Mines, quarries, waste dumpsites
- Construction

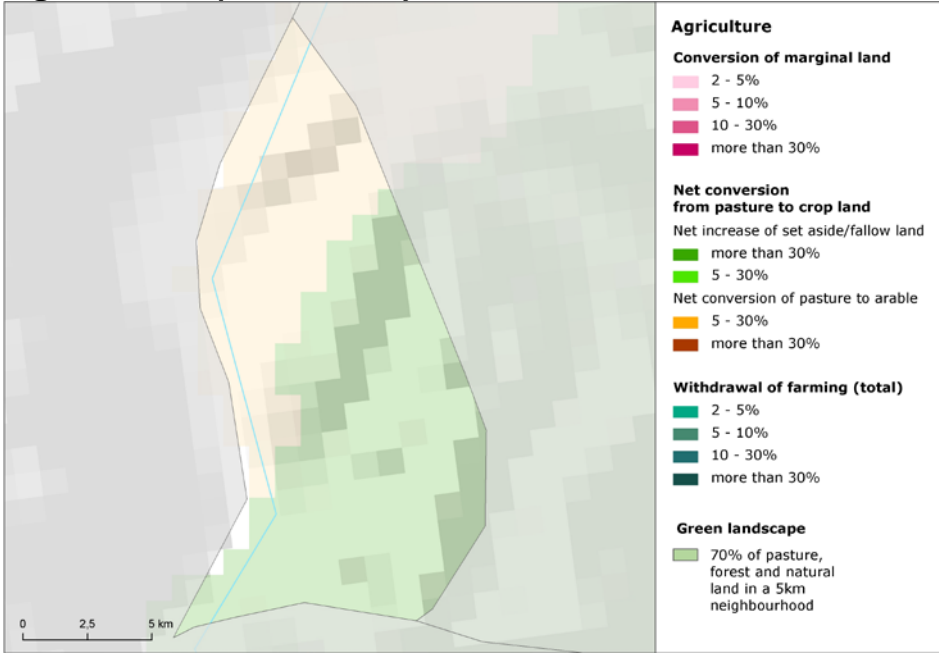
3.10. Artificial land take 2006-2012 [ha/year]



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



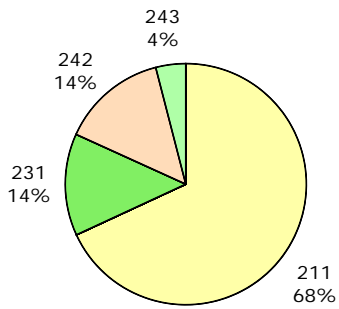
Agriculture (2006-2012)



Take of arable land by artificial sprawl

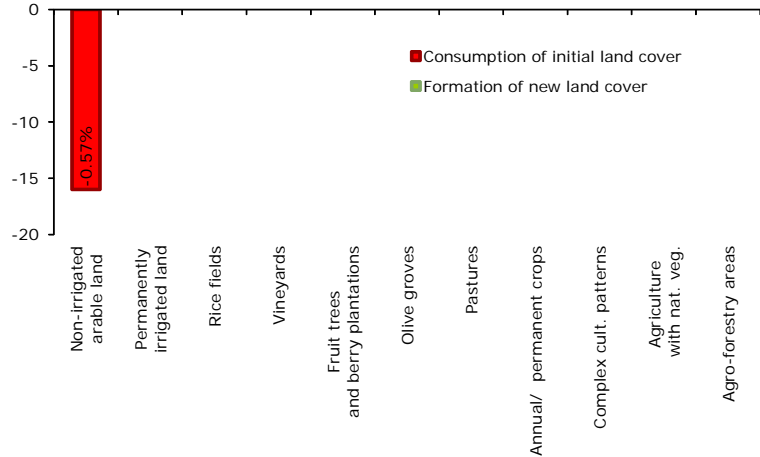
The only change in Liechtenstein agriculture is a consumption of non-irrigated arable land by artificial sprawl. This change only covered about 20 hectares, however, considering the very small total area of agricultural land in the county, it means that almost 1% of the total arable land has been taken by this conversion.

4.12. Agricultural areas 2012 [% of total area]

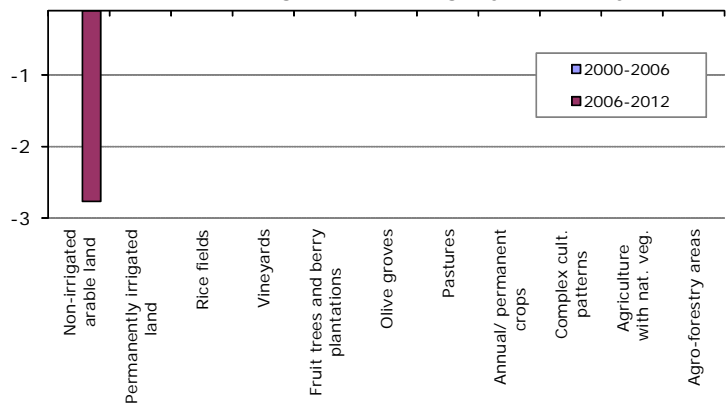


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas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

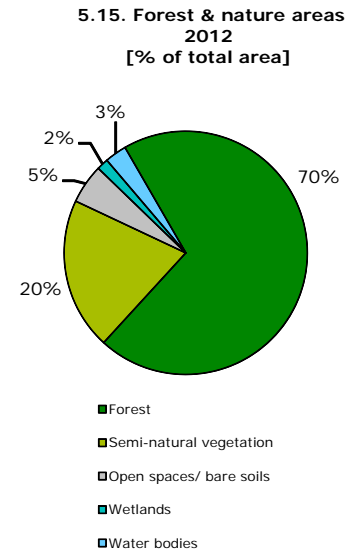
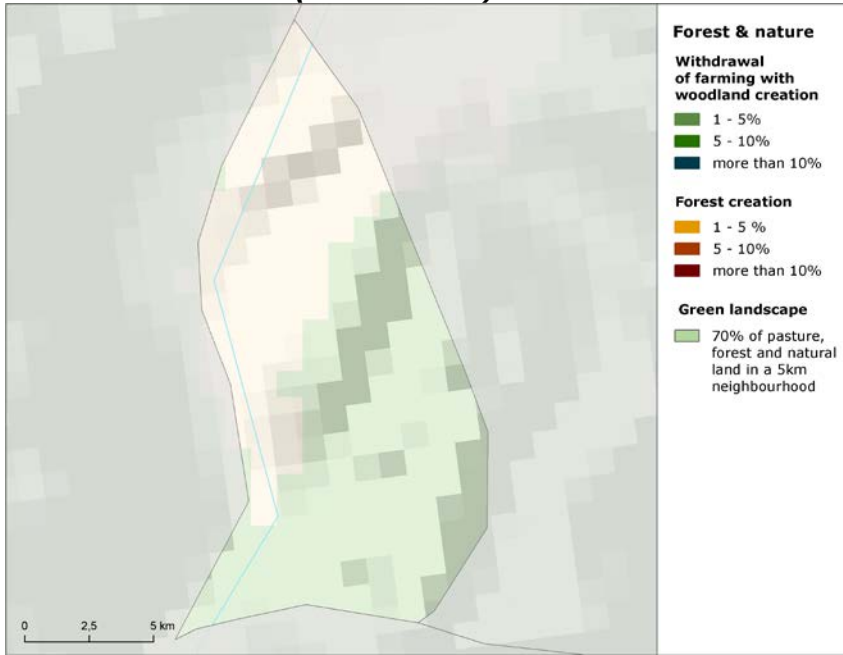
4.13. Development of agricultural areas 2006-2012 – detailed balance [ha]



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

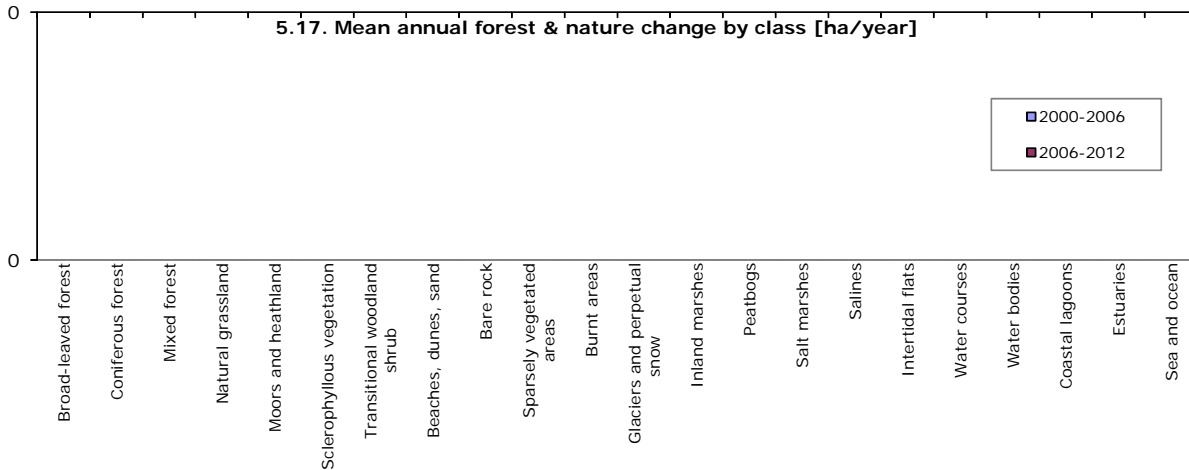
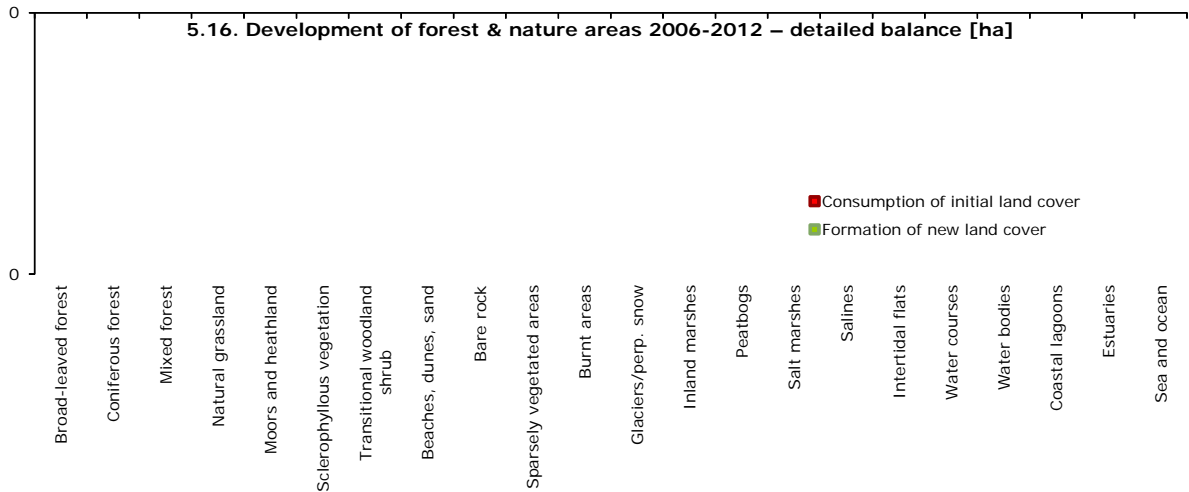


Forest & nature (2006-2012)



No forest and nature land development

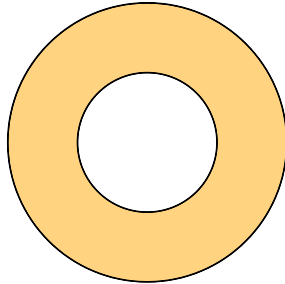
There was no observed development of the natural land in Liechtenstein, which is the same situation as in the previous period 2000-2006.



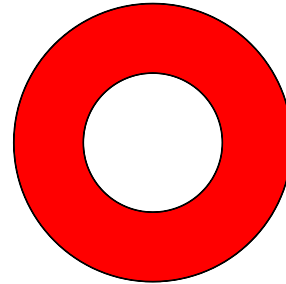
Annex: Land cover flows and trends

Land cover flows 2006-2012

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

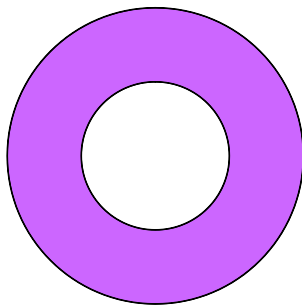


6.19. Formation of land cover
2006-2012 [% of total change
area]



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

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

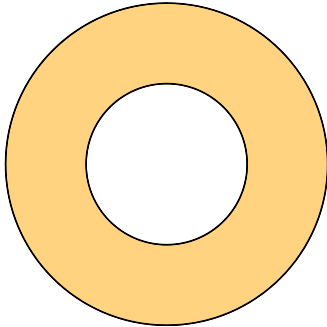


- lcf1 Urban land management
- lcf2 Urban residential sprawl
- lcf3 Sprawl of economic sites and infrastructures
- lcf4 Agriculture internal conversions
- lcf5 Conversion from forested & natural land to agriculture
- lcf6 Withdrawal of farming
- lcf7 Forests creation and management
- lcf8 Water bodies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

Liechtenstein

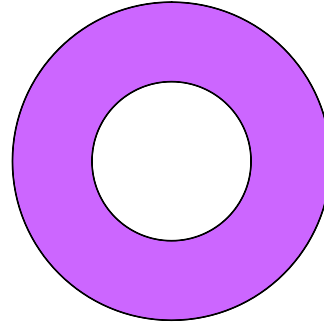
Artificial areas

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



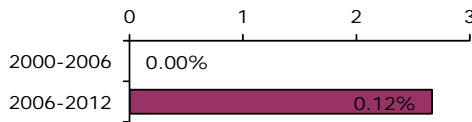
Arable land
&
permanent
crops
100%

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

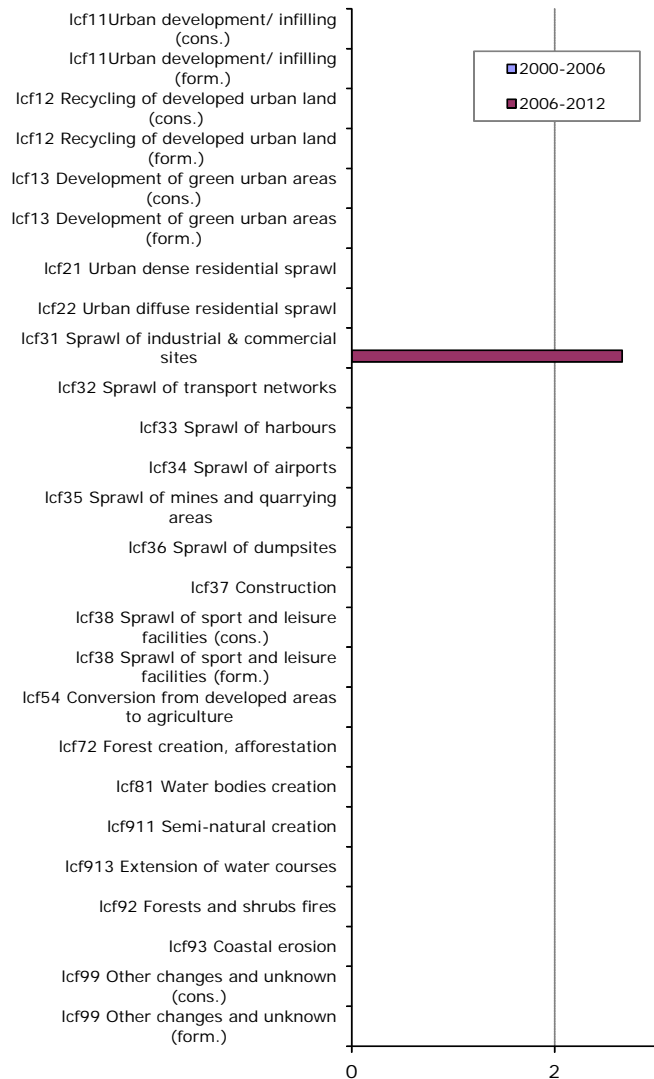


Industrial/
commerc.
100%

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



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



Liechtenstein

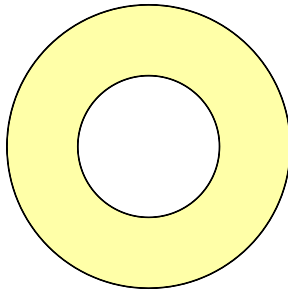
Agriculture

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

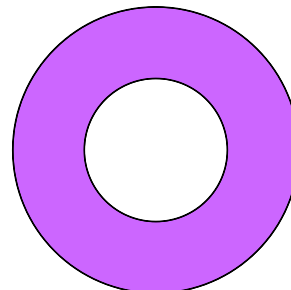
8.26. Formation of agricultural land from non-agriculture 2006-2012 [% of total]

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]



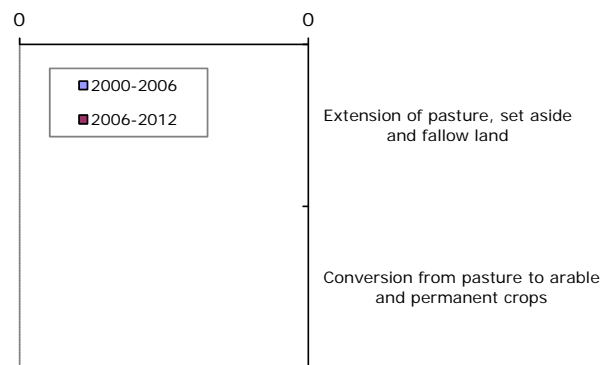
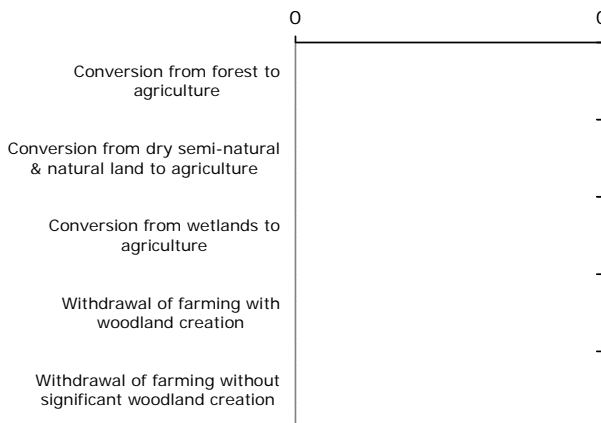
Non-irrigated arable
100%



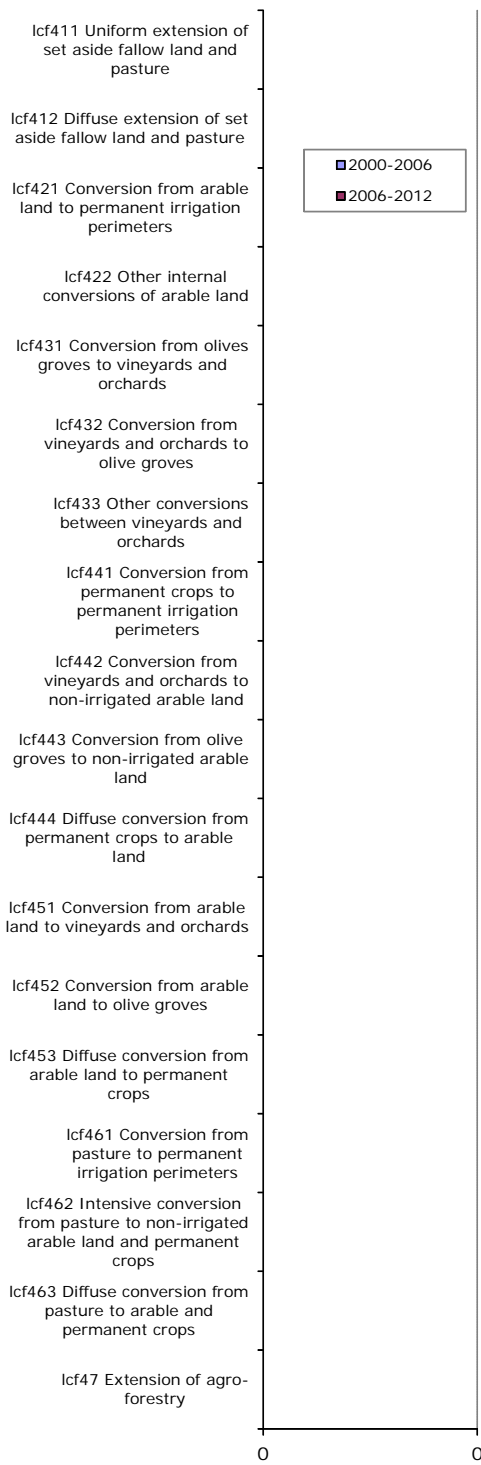
Industrial/commercial
100%

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

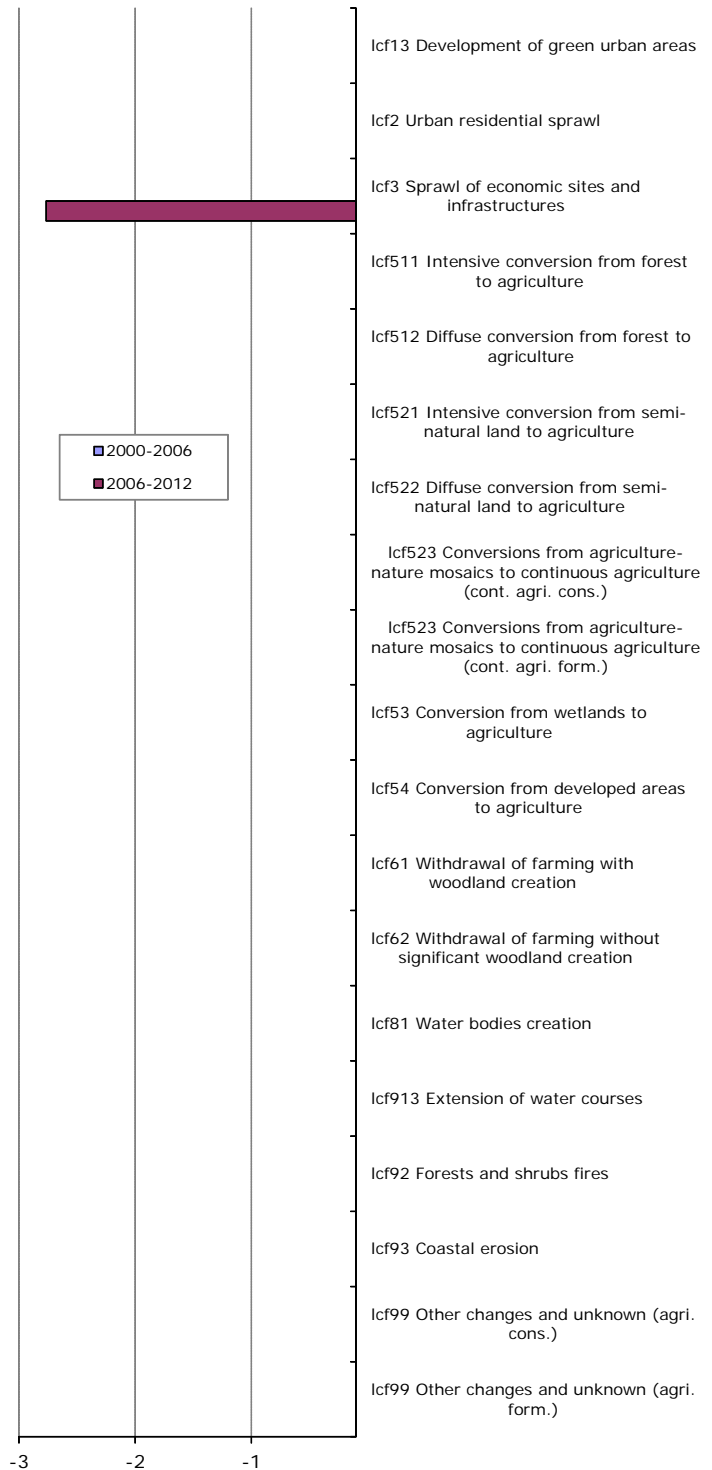
8.30. Mean annual conversion between arable land and pasture [ha/year]



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



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



Forest & nature

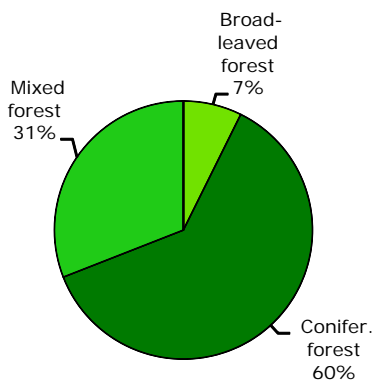
10.33. LC consumed by forest & nature 2006-2012 [% of total]

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

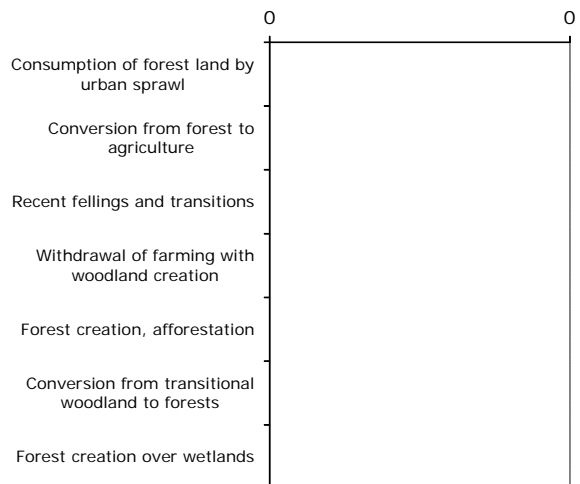
10.35. Consumption of forest & nature land by non-forest/nature 2006-2012 [% of total]

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

10.37. Forested land 2012 [% of total area]

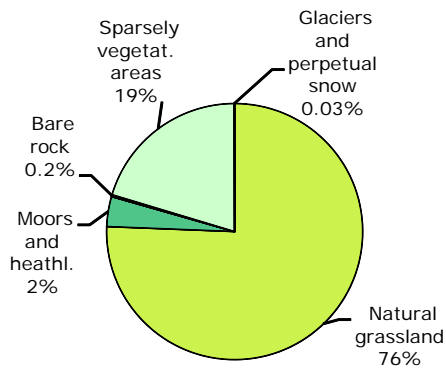


10.38. Main trends in woodland & forests consumption/formation 2006-2012 [ha/year]

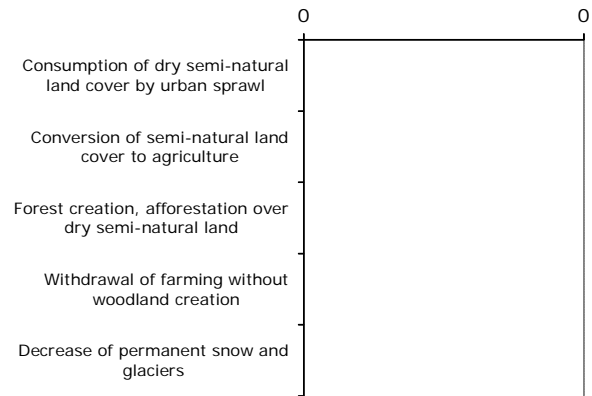


Liechtenstein

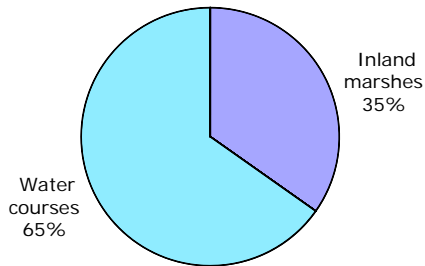
11.39. Dry semi-natural areas 2012
[% of total area]



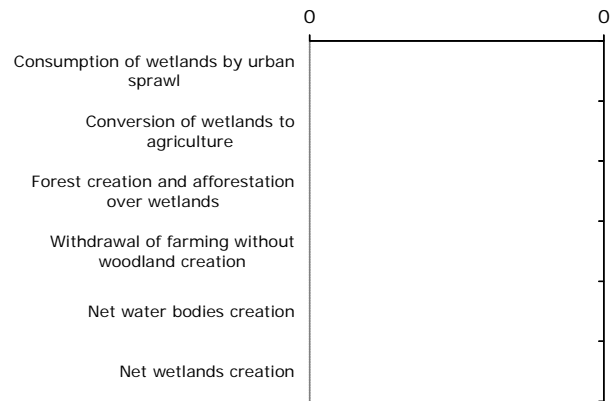
11.40. Main trends in dry semi-natural land consumption/formation 2006-2012
[ha/year]



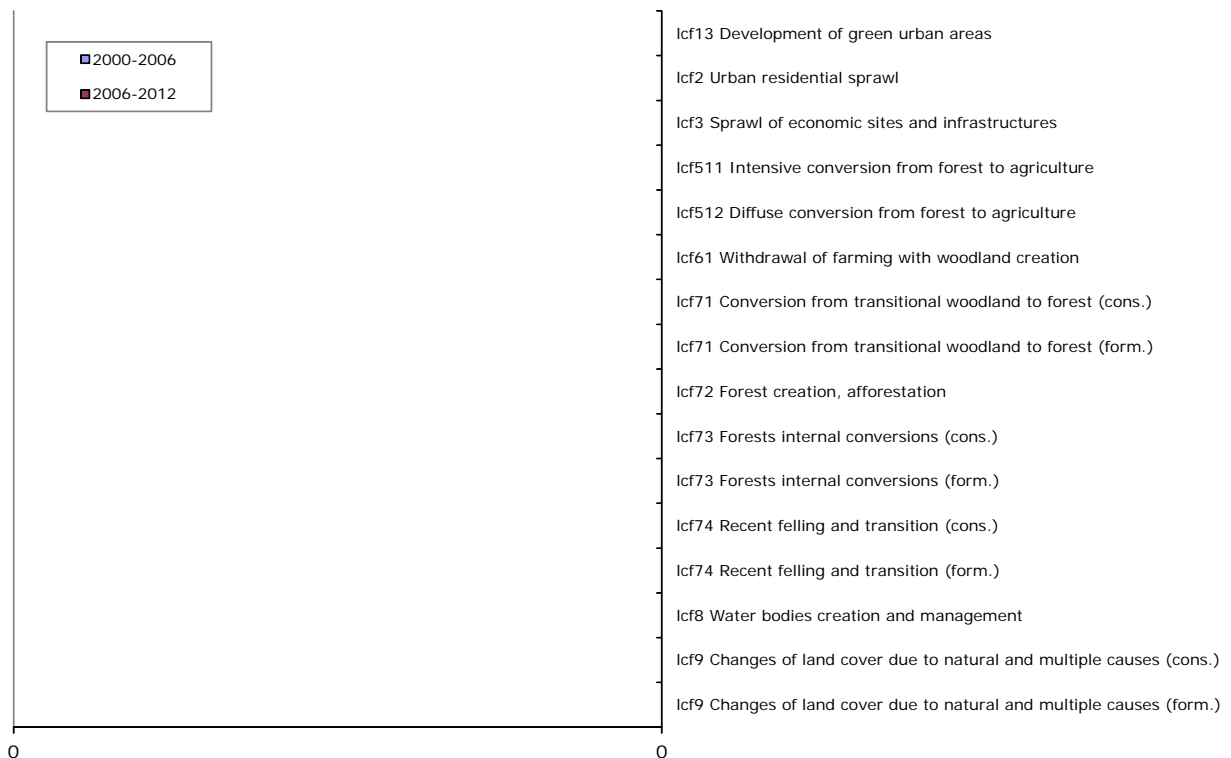
11.41. Wetlands & water 2012
[% of total area]



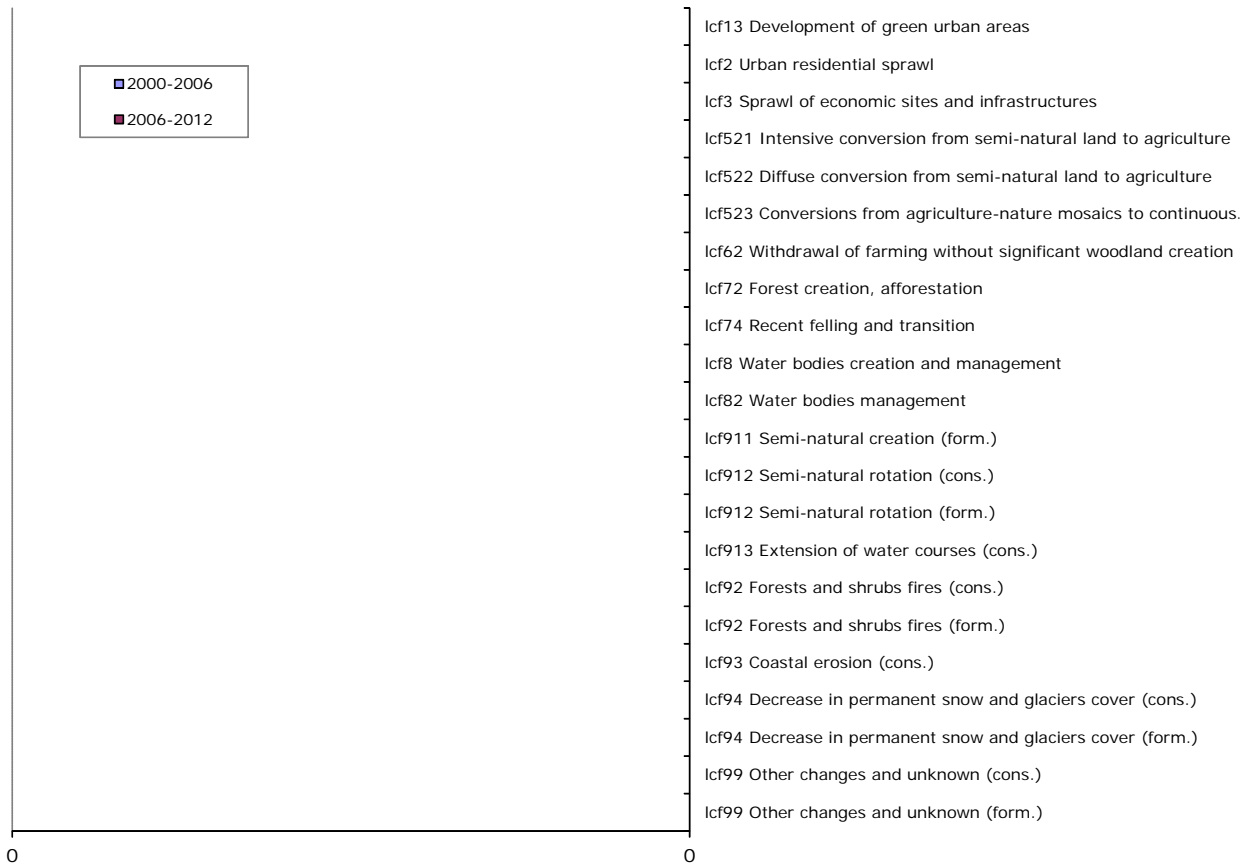
11.42. Main trends in wetlands & water consumption/formation 2006-2012
[ha/year]



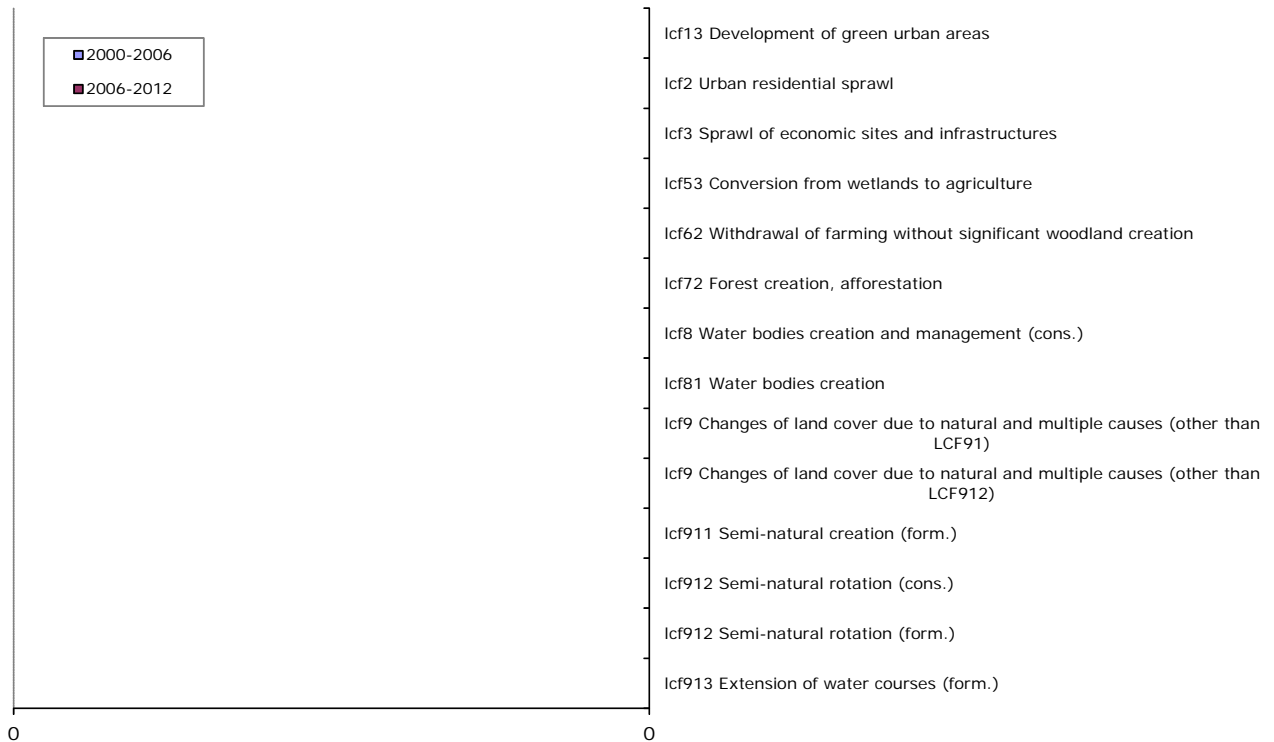
11.43. Mean annual conversions of forest & other woodland
[ha/year]



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

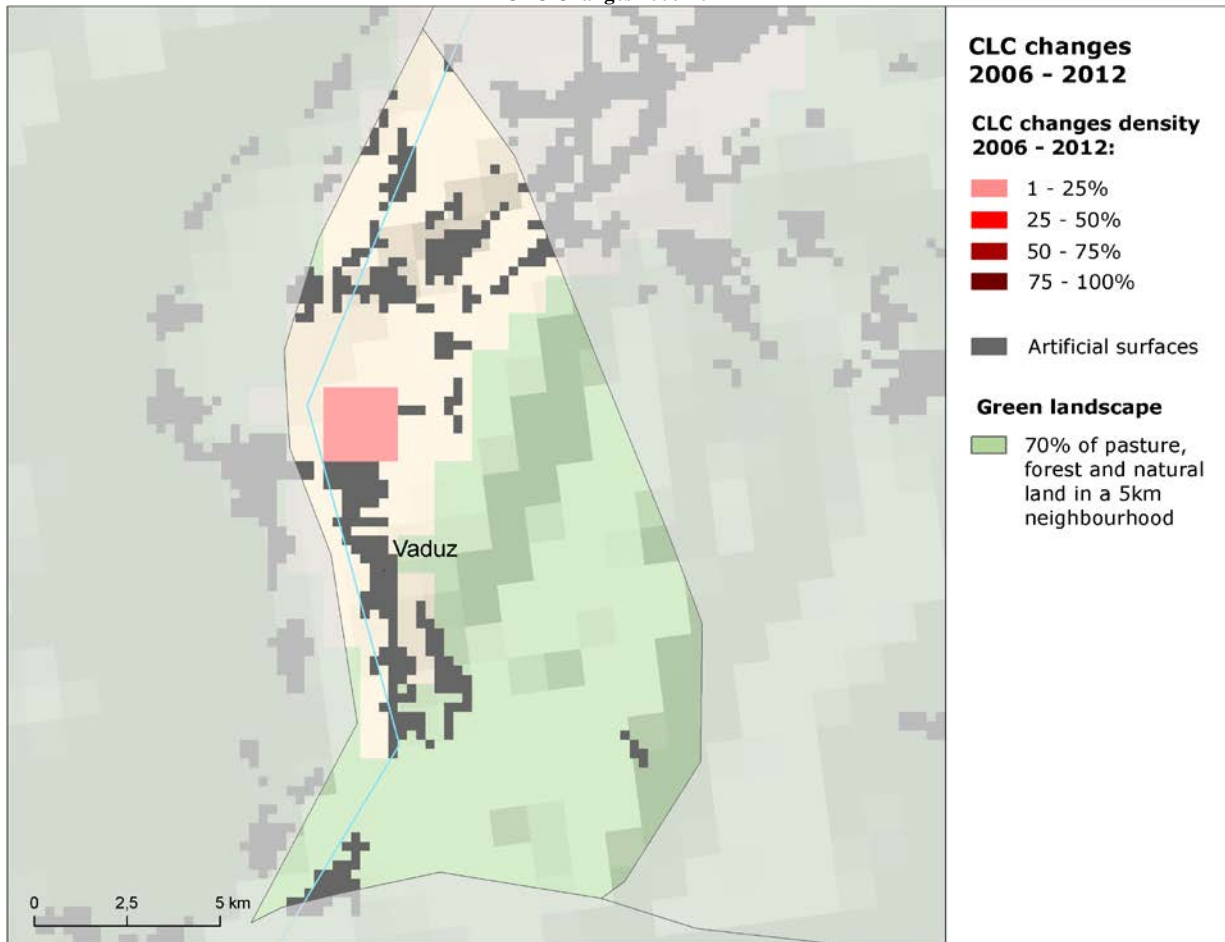


12.45. Mean annual conversions of wetlands and water LC [ha/year]

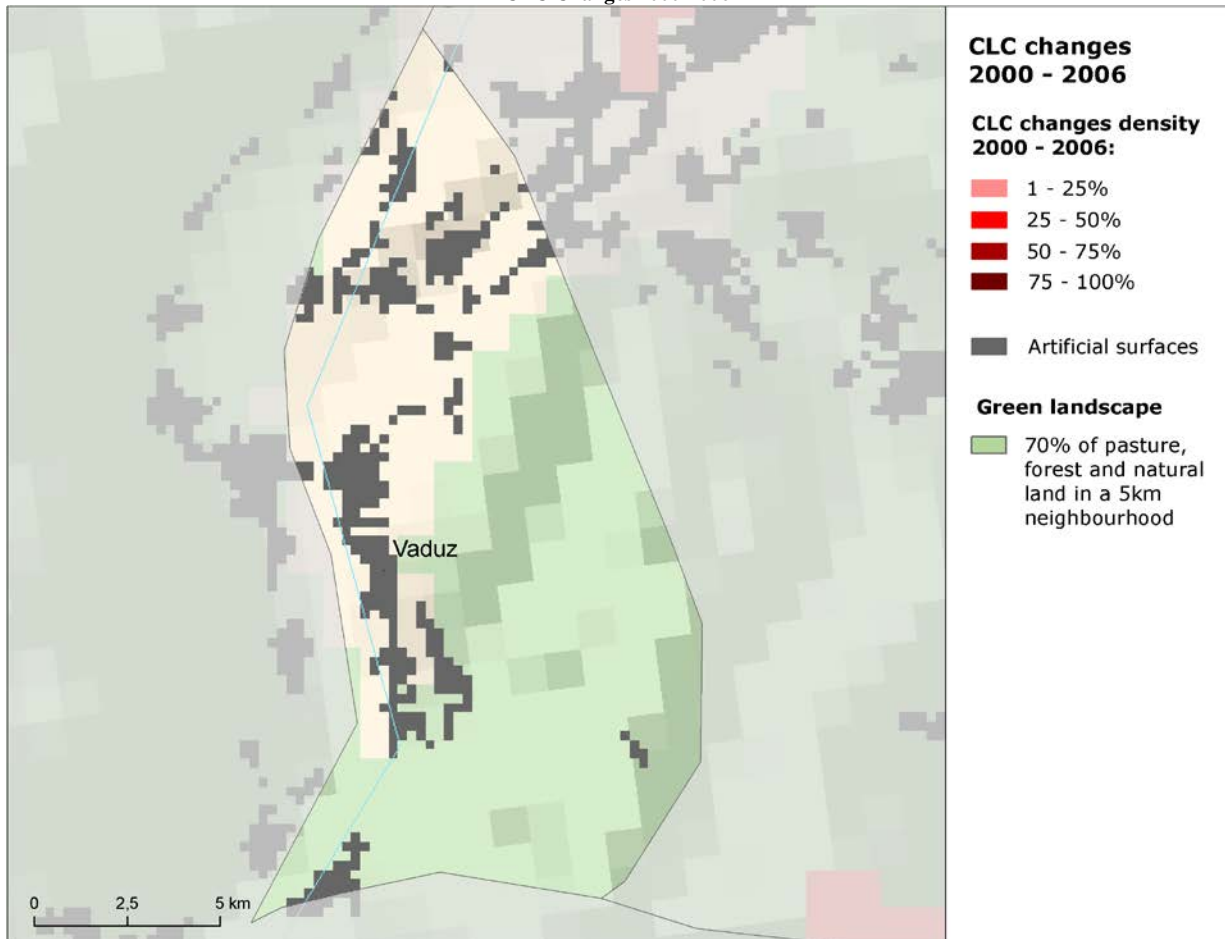


Liechtenstein

CLC Changes 2006-2012

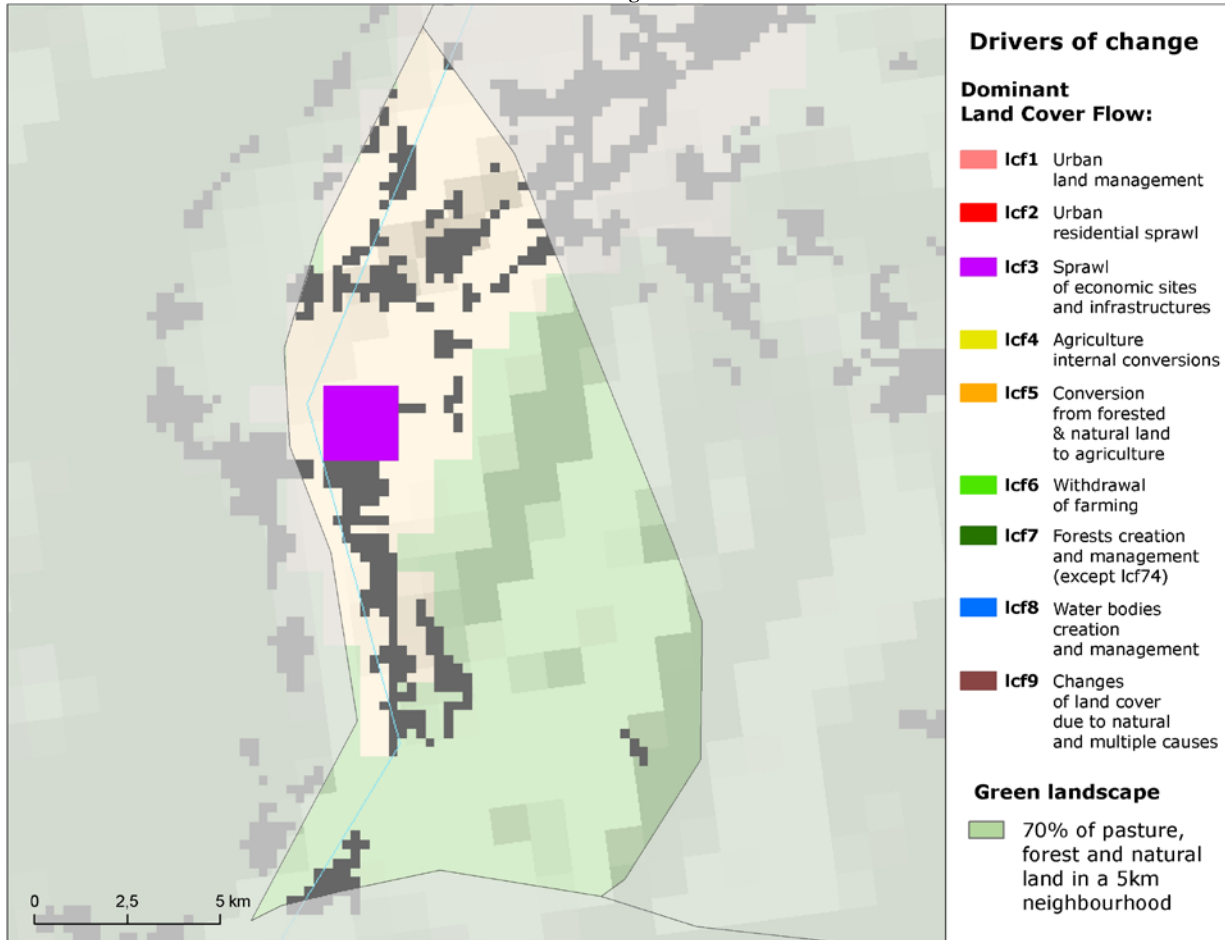


CLC Changes 2000-2006

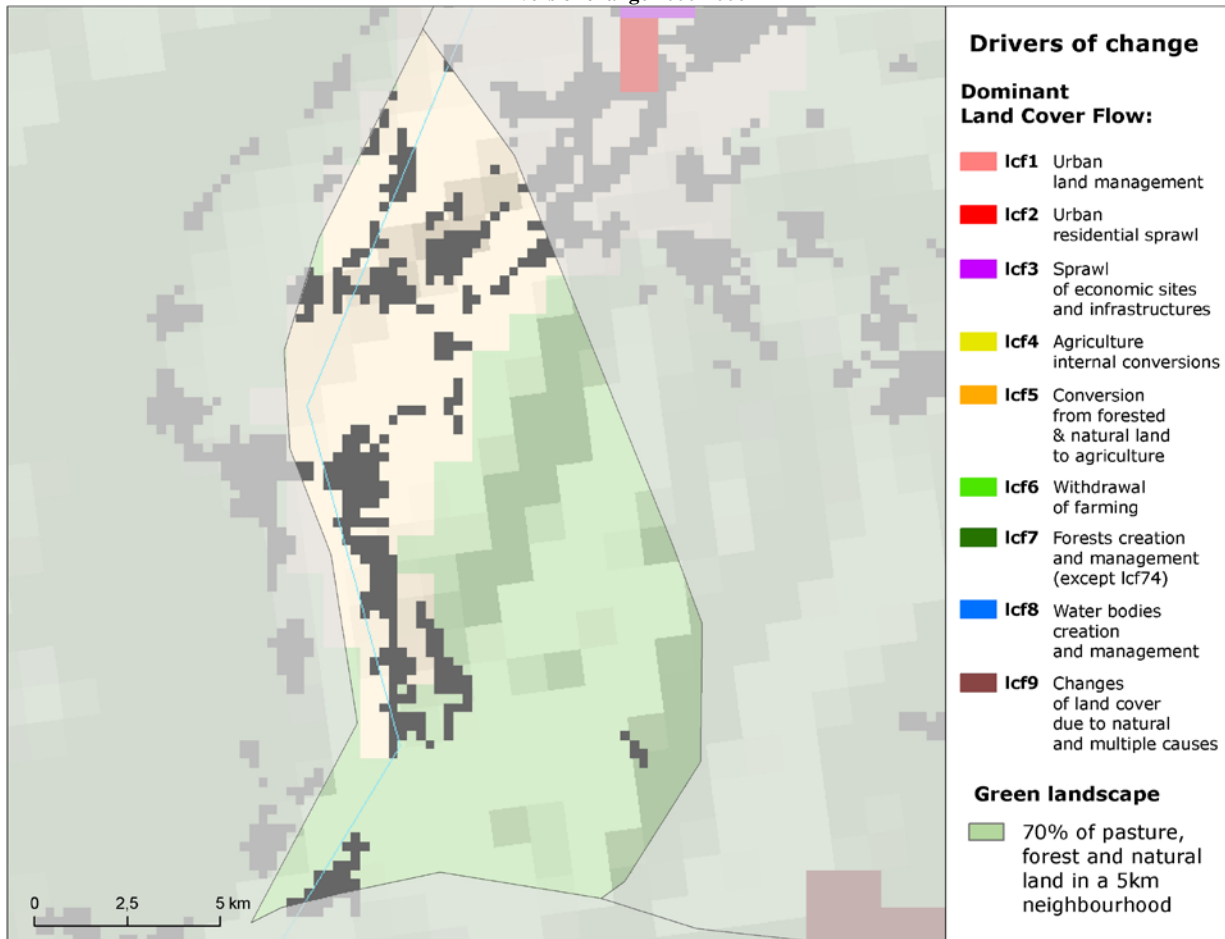


Liechtenstein

Drivers of change 2006-2012

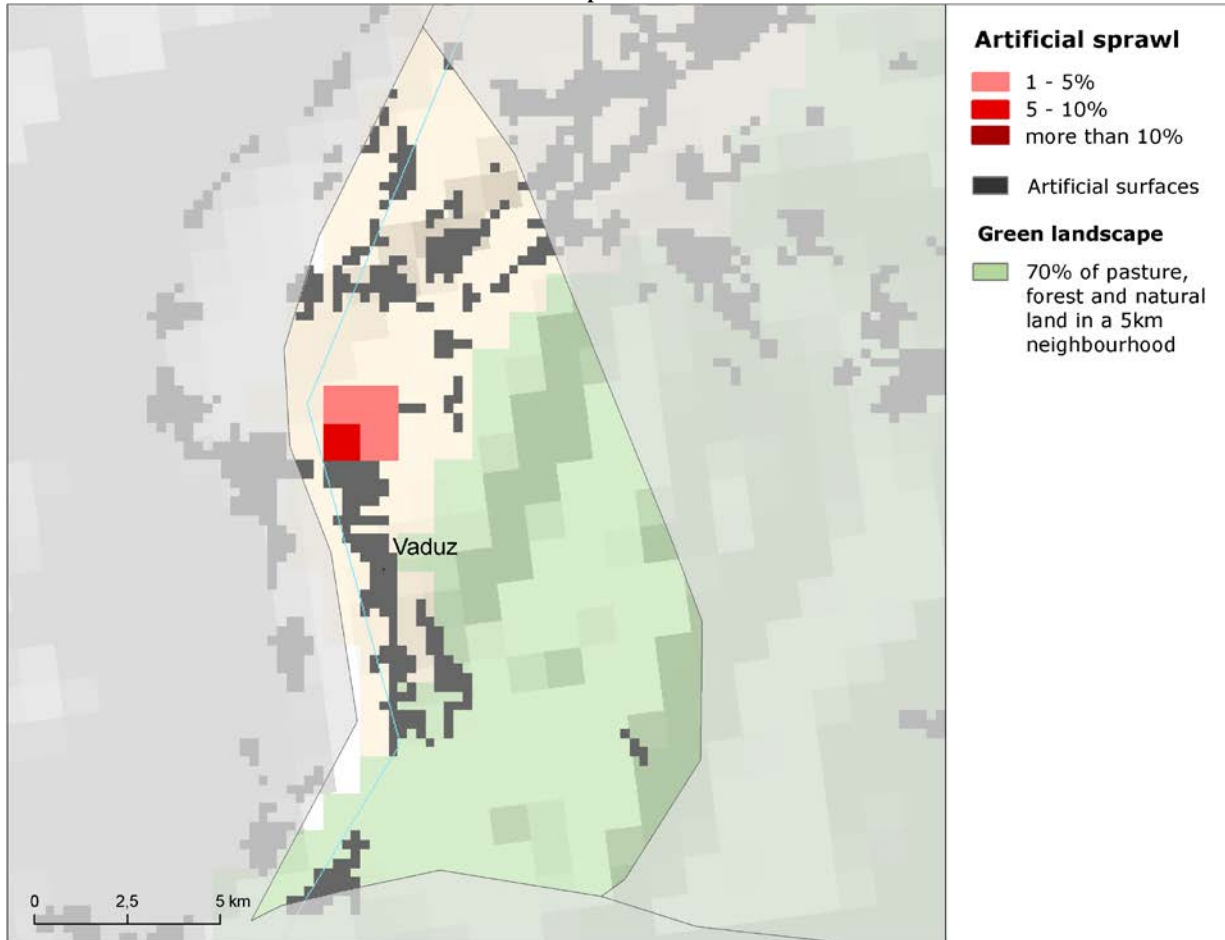


Drivers of change 2000-2006

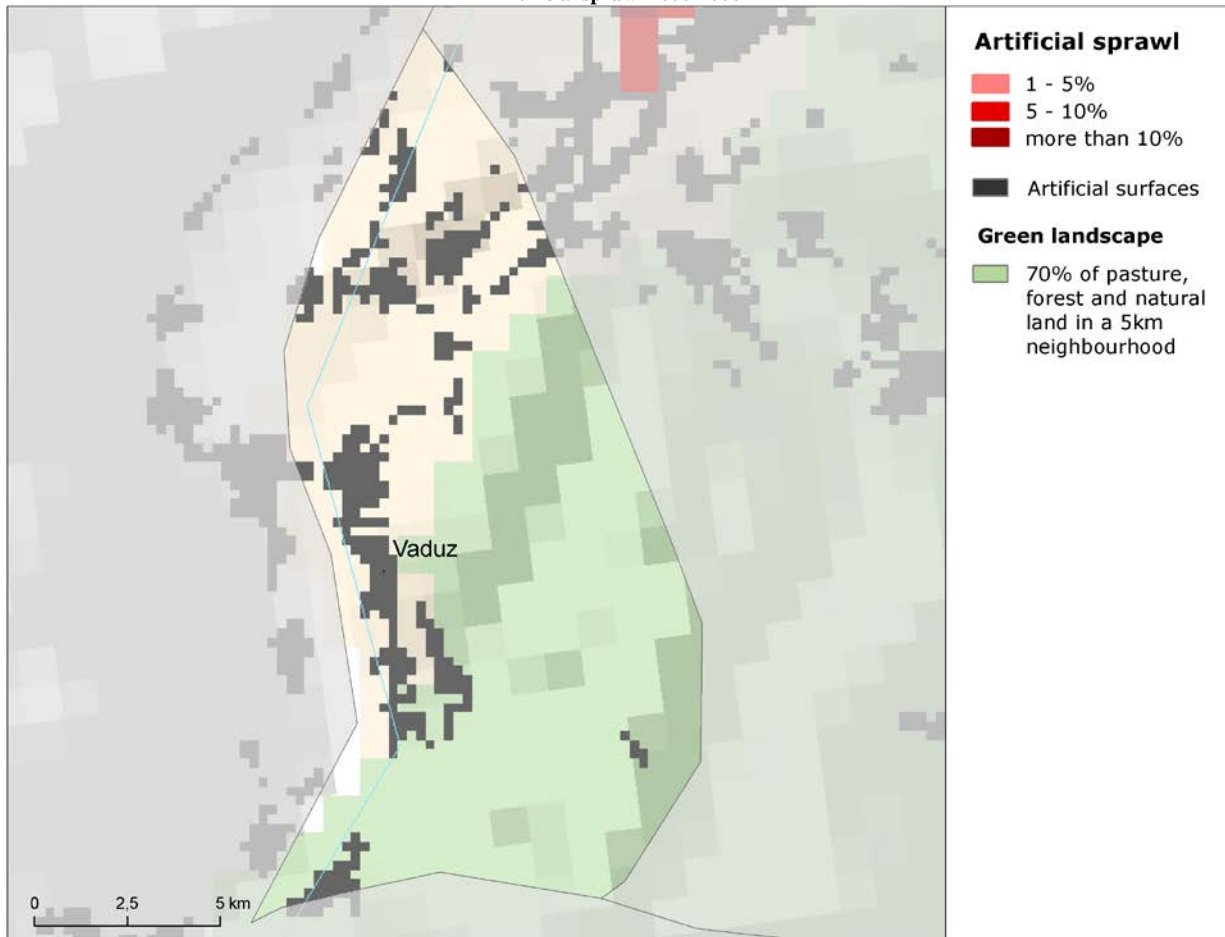


Liechtenstein

Artificial sprawl 2006-2012

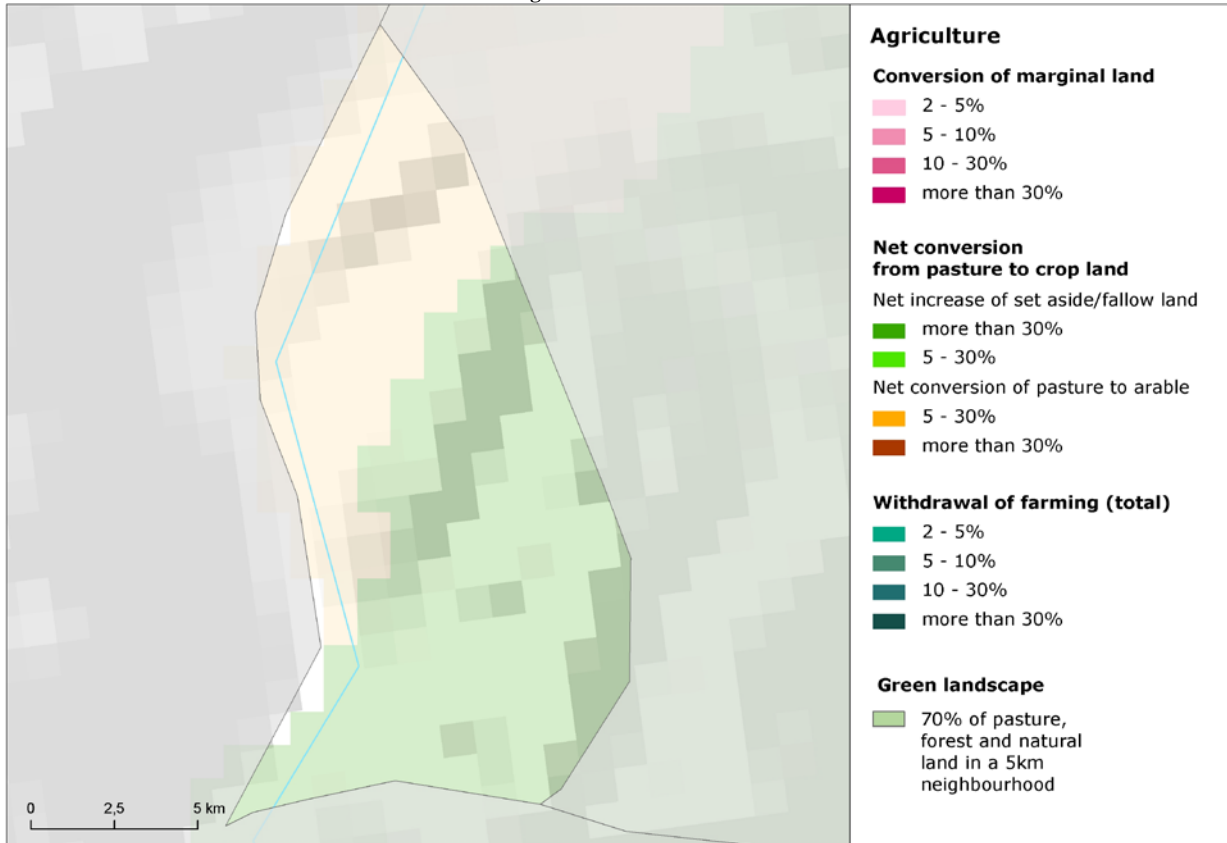


Artificial sprawl 2000-2006

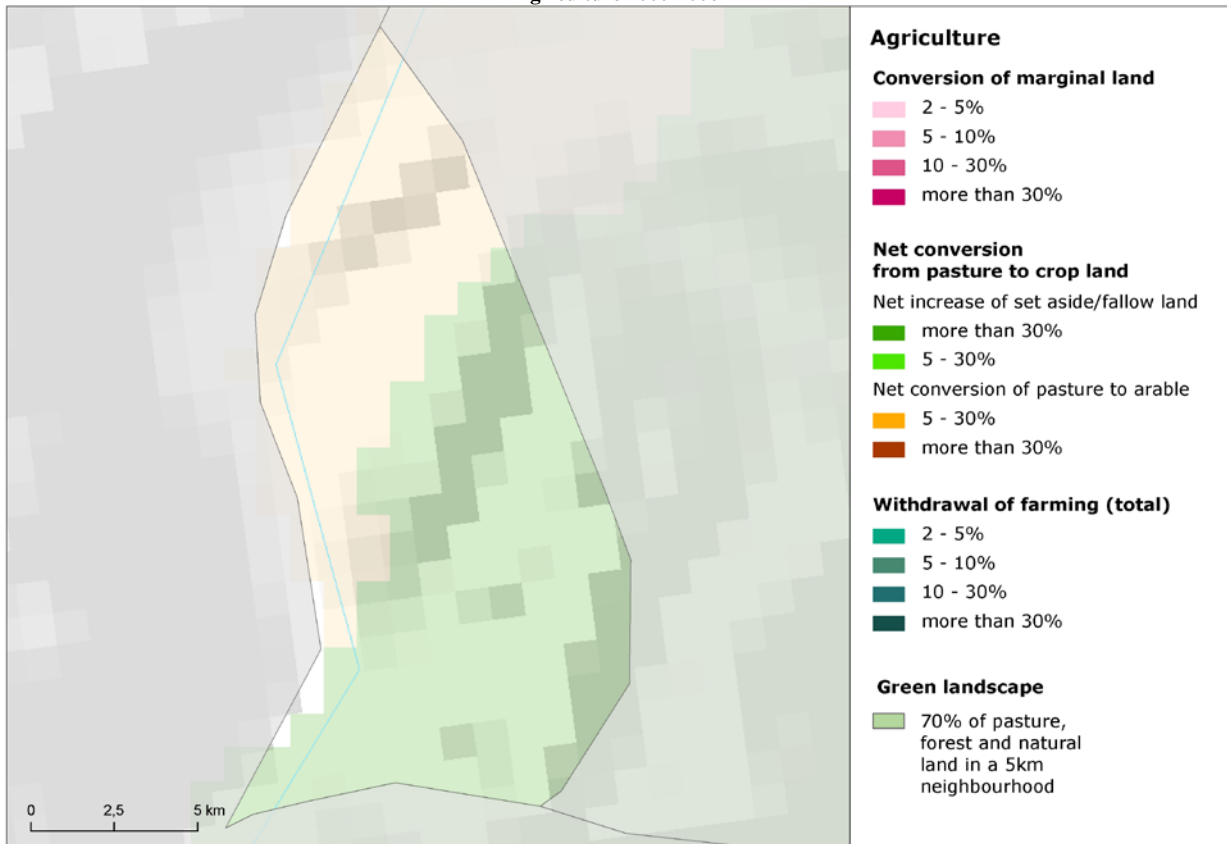


Liechtenstein

Agriculture 2006-2012

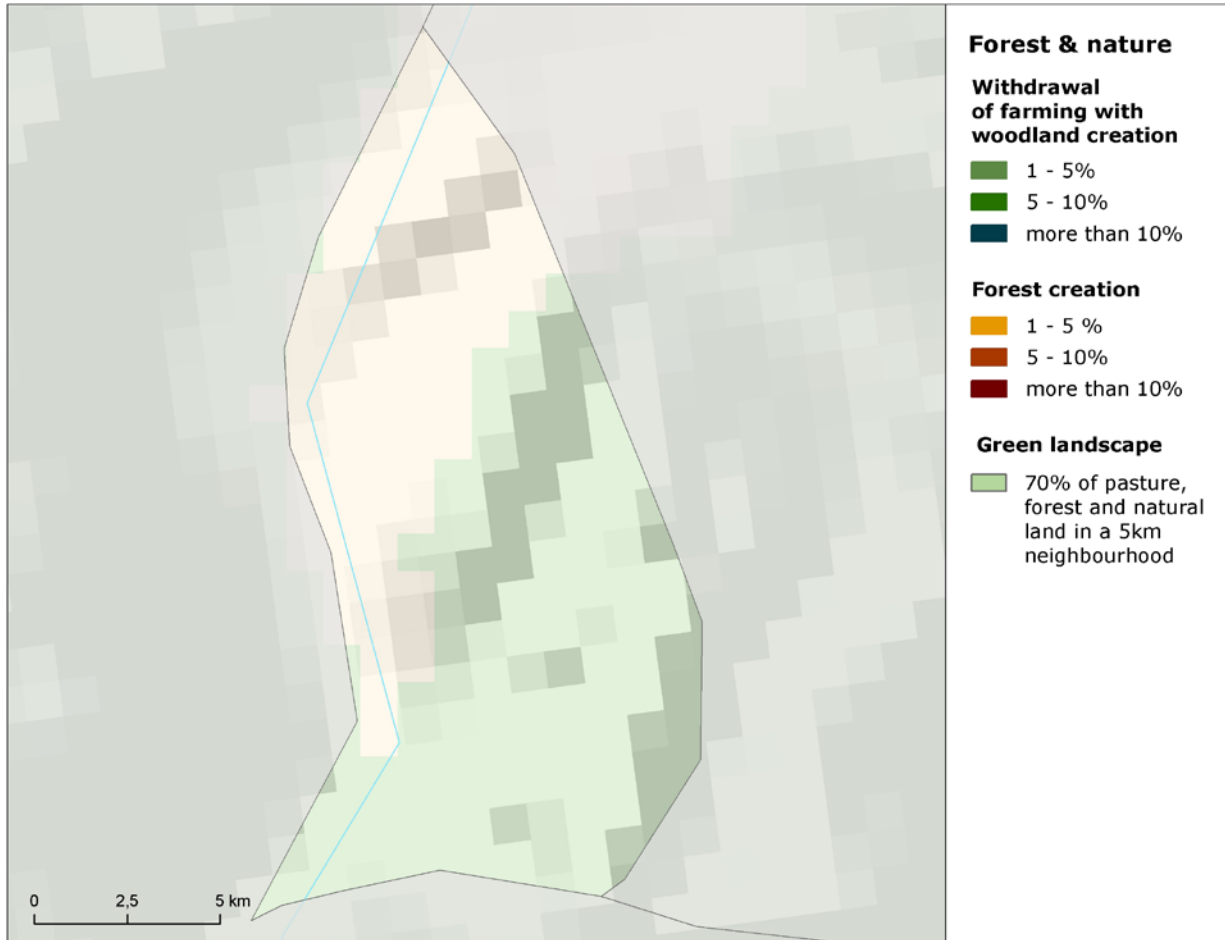


Agriculture 2000-2006



Liechtenstein

Forest and nature 2006-2012



Forest and nature 2000-2006

