

Contrasted evolution of grassland area across Europe in the past decades to promote grass-based business opportunities in rural areas (GO-GRASS)



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Introduction

Permanent and temporarily grassland defined in the EC regulation 1307/2013 of CAP.
New definition of permanent grassland recognizes all types of permanent grasslands across Europe.
CAP payments as “arable crops” (temporary grasslands) or as “permanent grassland/pasture”.

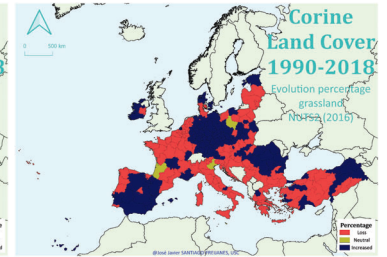
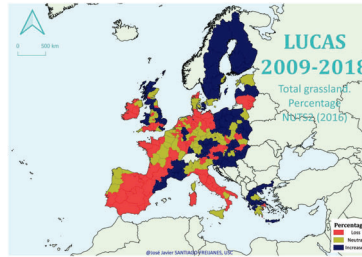
Materials and methods

Data Mapping:
From **Corine Land Cover (CLC)** raster 1 ha/pixel resolution
With **QGIS, 3.10**: the **zonal stats** were acquired in the shapefile with the EU NUTS2 areas.

From **LUCAS data** are points in CSV format.
Excel filtering to select points with the main or secondary cover as grassland and cluster in NUTS2 regions.

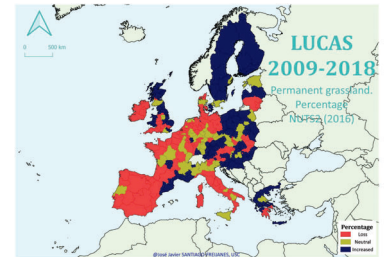
Grassland

1990 to 2000 grassland area decreased.
2012 to 2018 grassland area increased.
CAP payments to land use and not to production.
From 2013 CAP to don't reduce permanent grassland more than 5%.
LUCAS 2009-2018 :
Most of western Europe reduced grasslands.
Eastern Europe maintained or increased.
CLC 1990-2018 :
Spain, Germany, Ireland, Estonia, Rumania, Ukraine part of Denmark and Poland increased grasslands.
France, Italy, Greece and most of the Eastern countries reduced it.



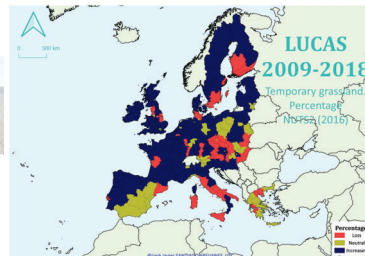
Permanent grassland

Most of Western Europe decreased.
Eastern and Northern Europe more contrasted.
2006-2009 Clear reduction of permanent grassland in Europe.
2012-2015 More reduction
2015-2018 Maintained or increased (5% maintenance promoted by the CAP Greening).



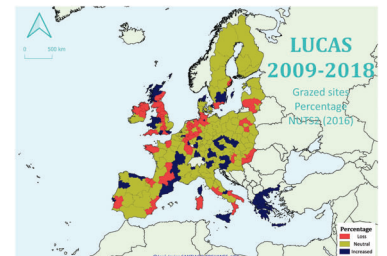
Temporary grassland

Generalized increase all over Europe except for the 2012-2015.



Grazing

More in western Europe / scarce grazing in east or northern Europe.
Low proportion of permanent grassland in Northern & western Europe.
Grazed areas were maintained and even increased between 2009 and 2018.
Unmanaged natural grassland increased in most of the areas of Europe (population ageing & land abandonment).



Conclusion

1990 to 2018: Northern and Southern Europe increased grassland proportion / Central Europe have reduced it.
2009 to 2018 LUCAS dataset most of the East and Northern countries increased their proportion of grassland / Southern and Western have reduced it.
Permanent grasslands are so far the most important type of grasslands in Europe.
Permanent grasslands reduced in the Western Europe / increasing in some Eastern and Northern EU countries, with a low percentage of permanent grasslands.
Increase of the temporary grassland all over Europe.



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<https://www.go-grass.eu/>