Agroforestry: a tool to increase grazing resources

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Agroforestry

- Definition
- Ecointensification: Increasing production optimizing spatial resources use
- Ecointensification: Increasing production optimizing temporal resources use

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Providing solutions: understanding what agroforestry is

Deliverate integration of woody perennials and an agricultural product from the lowerstorey (Annex 1)











Silvopasture Brief description Woody + forage and animal production Understand the second second

19.5 Million ha

10% EU potential area













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BIOLOGICAL BASIS

Better use of the grazing resources:

Aerial level







INCREASE BIOMASS PRODUCTION PER UNIT OF LAND:

High employment rate

Challenges:

- a) Best combinations to increase farm profit
- b) Obtain higher profit from the value chain

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Temperature Precipitation

MEDITERRANEAN ARID (0,2-2 t MS/ha) MEDITERRÁNEAN HUMID (5-10 t MS/ha) SOUTH ATLANTIC (10-15 t MS/ha)







Agroforestry systems: a land use option to enhance productive, environment and social benefits

Acid soils Water pH < 4.5

















Basic soils Water pH > 8



BOD

Extending grazing season: end of spring

Climate Smart Agriculture

Resilience

Adaptation: Drought Flooding **Biodiversity**

Using legumes in spring



Using legumes in summer



Using legumes in summer



Using fruits in atumn



Using forestland in autumn/winter





Reducing extreme events impact

EU indicative measures that may be included in the information on LULUCF actions submitted pursuant to article 10(2)(d) (Decision 529/2013/EU) and may relate to Agroforestry

Measures related to	Examples
Cropland management	Agroforestry
Grazing management and pasture improvement	 Preventing Grassland to Cropland conversion to native vegetation Increasing productivity Improving nutrient management Introducing more appropriate species,
Forest activities	 Afforestation and reforestation Conservation of C in existing forest Enhancing production in existing forests Increasing harvested wood products Enhancing forest management (optimize species composition, tending, thinning and soil conservation)
Preventing deforestation	
Strengthening protection against natural	
disturbances such as fire, pest and storms	
Substitution GHG intensive energy feedstock and	
materials with harvested wood products	

Conclusions

* Agroforestry is an excellent tool to extend grazing season in both agriculture and forest lands

* There is a good opportunity to mitigate and adapt to climate change and make grazing systems more resilient by using Agroforestry

Conclusions

*Adequate design of policies (research, learning, innovation) should be delivered in order to take advantage of Agroforestry practices to combat climate change for grazing systems

Let's develop a European Agroforestry Strategy for farmers

Thanks squera.losada@usc.es mrosa.mo