



EURAF FIRST AGROFORESTRY CONFERENCE

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Extant vs. new agroforestry systems: A policy perspective

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General objective of European agroforestry

To establish sustainable land use systems that involve trees and crops or animals and ensure a large variety of ecosystem services (provisional, regulating, supporting and cultural) (Mosquera-Losada et al. 2005)

✿ Basic elements of this objective

- ✿ sustainability
- ✿ polyculture
- ✿ ecosystem services

✿ Extant and new (modern) agroforestry systems

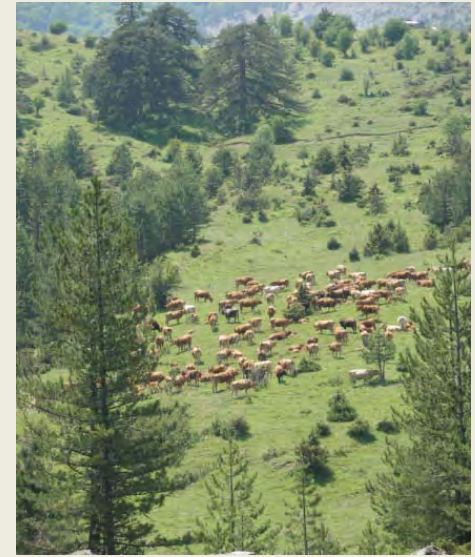
Extant agroforestry systems



Dehesa-Montado



Oaks + cereals



Wood pasture



Grazed olive orchard



Lopped mulberry for fodder



Fruit trees + lucerne

Characteristics of the extant systems

- ☀ **Grown on small farm plots**
- ☀ **Various trees planted irregularly**
- ☀ **Labor intensive**
- ☀ **Incompatible with modern agricultural practices**
- ☀ **Tree species with relatively low growth potential and market value**
- ☀ **Low financial returns**
- ☀ **High ecological and culture value**
- ☀ **Mainly found in southern Europe (Mediterranean)**

New (modern) agroforestry systems



Walnuts + cereal



Poplars + cereal



Peaches + beans



Walnuts + cotton



Wild cherries + maize

Characteristics of new systems

- ☀ **Grown on large farms**
- ☀ **Trees planted in rows (alley cropping)**
- ☀ **Capital intensive**
- ☀ **Adapted to mechanized exploitation**
- ☀ **Tree species with high potential growth and market value**
- ☀ **High financial returns**
- ☀ **Increased sustainability**
- ☀ **Relatively low ecological and cultural value**
- ☀ **Mainly found in northern Europe**

Current EU policy on agroforestry

Agroforestry is not considered as an agricultural land use (Pillar I). Farms with more than 50 trees/ha are not eligible for payments

CAP 2007-2013 (Pillar II): establishment of new systems on agricultural land

CAP 2014-2020 (article 24): “Support ... shall be granted ... and shall cover the costs of establishment...”. “ The maximum number of trees to be planted...”

Policy is biased towards new systems; extant systems are ignored!

There is a limited involvement of the European farmers in agroforestry so far

Problems related with establishment of new systems

- ☀ Owners of large farms are reluctant to plant trees because they:
 - ☀ are afraid of losing support from the 1st Pillar
 - ☀ will have a reduced income from the crop
 - ☀ on productive land, investment for the future is unattractive
- ☀ Owners of small farms are additionally hesitant because :
 - ☀ they have to allocate part of their small farm to agroforestry
 - ☀ if they plant trees in the boundaries they need the consent of the neighbor which may not be positive
- ☀ Therefore, countries with large farms are favored in relation to the ones with small farms

Average farm size in EU countries

Country	Average size below 27 ha		Country	Average size above 27 ha
Austria	19		Belgium	29
Bulgaria	6		Czech Republic	89
Greece	5		Denmark	60
Spain	24		Germany	46
Italy	8		Estonia	39
Cyprus	4		Ireland	32
Latvia	16		France	52
Lithuania	12		Luxembourg	57
Hungary	7		Netherlads	25
Malta	1		Slovakia	28
Poland	6		Finland	34
Portugal	13		Sweden	43
Romania	3		United Kingdom	54
Slovenia	6			

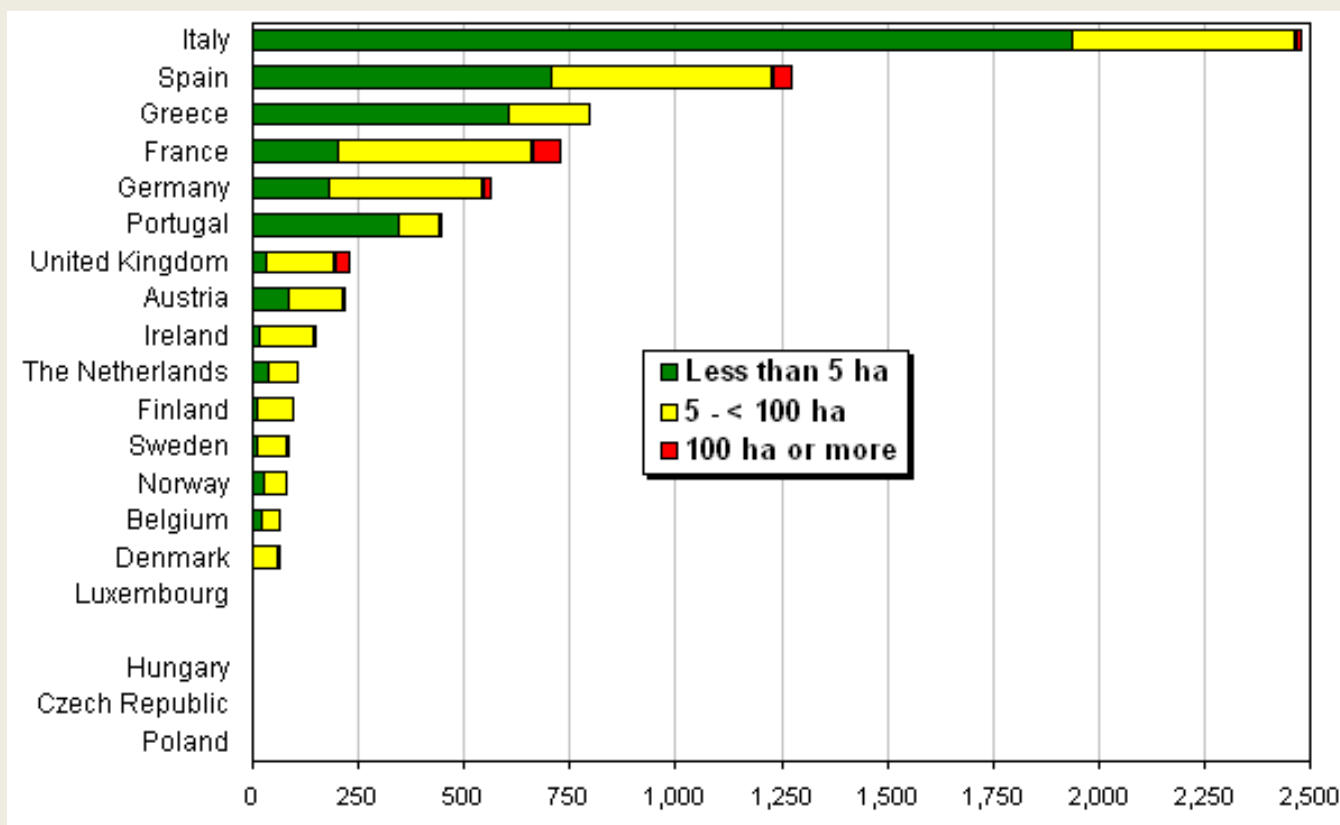
Source: Eurostat (Agriculture and Fisheries – 18/2011)

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Number of farms by size class (1995, in 1000)



Italy, Spain and Greece have much more farms than other European countries. Most of the farms in Italy and Greece are very small (<5 ha of land)

Source: Eurostat Yearbook 98/99

Prospects for southern Europe

- ☀ New systems are not expected to gain momentum in countries with predominantly small farms
- ☀ Instead, the maintenance and improvement of the extant systems may become a very attractive alternative
- ☀ Extant systems should be also included in the CAP
- ☀ Emphasis should be given on regulating ecosystem services of agroforestry systems (such as carbon sequestration and biodiversity) rather than on provisional services (e.g. timber)

Paper of the EURAF CAP reform working group (7th February 2012)

Rules for direct payments (Pillar I)

Support for rural
development (article
24) (Pillar II)

- First establishment of agroforestry systems
- Conversion of existing forests to agroforestry systems
- No provisions for the extant agroforestry systems

The paper should be amended to also
include maintenance and improvement
of the extant systems

Suggested treatments of extant systems

Tending of existing trees (e.g. pruning)

Thinning to the appropriate density to accommodate the crop or the grazing practice if tree density is too high

Plantation of additional trees if tree density is too low

Replacing existing trees with new species of faster growth or higher commercial value

Basic rule: Extant systems should be assessed on the basis of tree canopies rather than of tree numbers

Reasons for supporting the extant systems

- ☀ They cover large areas in Europe, particularly in the South
- ☀ They are key elements of the rural landscape and constitute an important European heritage
- ☀ They are high nature value areas, particularly important for carbon sequestration and maintaining biodiversity
- ☀ They are very vulnerable to land use changes
- ☀ The cost for their maintenance and improvement is relatively low
- ☀ Small farmers will be able to get involved in promoting European agroforestry as well
- ☀ Extant systems are expected to be degraded and phased out if not included in the new CAP

Additional measures

General for agroforestry

change the paradigm of the single crop

development of model agroforestry plots at European, national and regional levels for demonstration to technicians and farmers

organization of training courses and seminars

support of agroforestry research at European and national levels

Specific for the extant agroforestry systems:

to be inventoried at a pan-european level

to be linked with the European networks for environmental protection (e.g. NATURA 2000, high nature value areas, etc.)

Concluding remarks

- ❖ For agroforestry to be promoted in Europe it needs to be supported by both Pillars of CAP
- ❖ The establishment of new systems is currently supported by the 2nd Pillar but farmers risk losing eligibility to receive support from the 1st Pillar
- ❖ Extant systems are not supported by any Pillar
- ❖ An amendment of the current policy is needed so that extant farms:
 - do not lose eligibility for support from the 1st Pillar
 - get support from the 2nd Pillar for maintenance and improvement of their trees
- ❖ The current threshold of 50 trees/ha is too restrictive and it should be removed



Thank you !