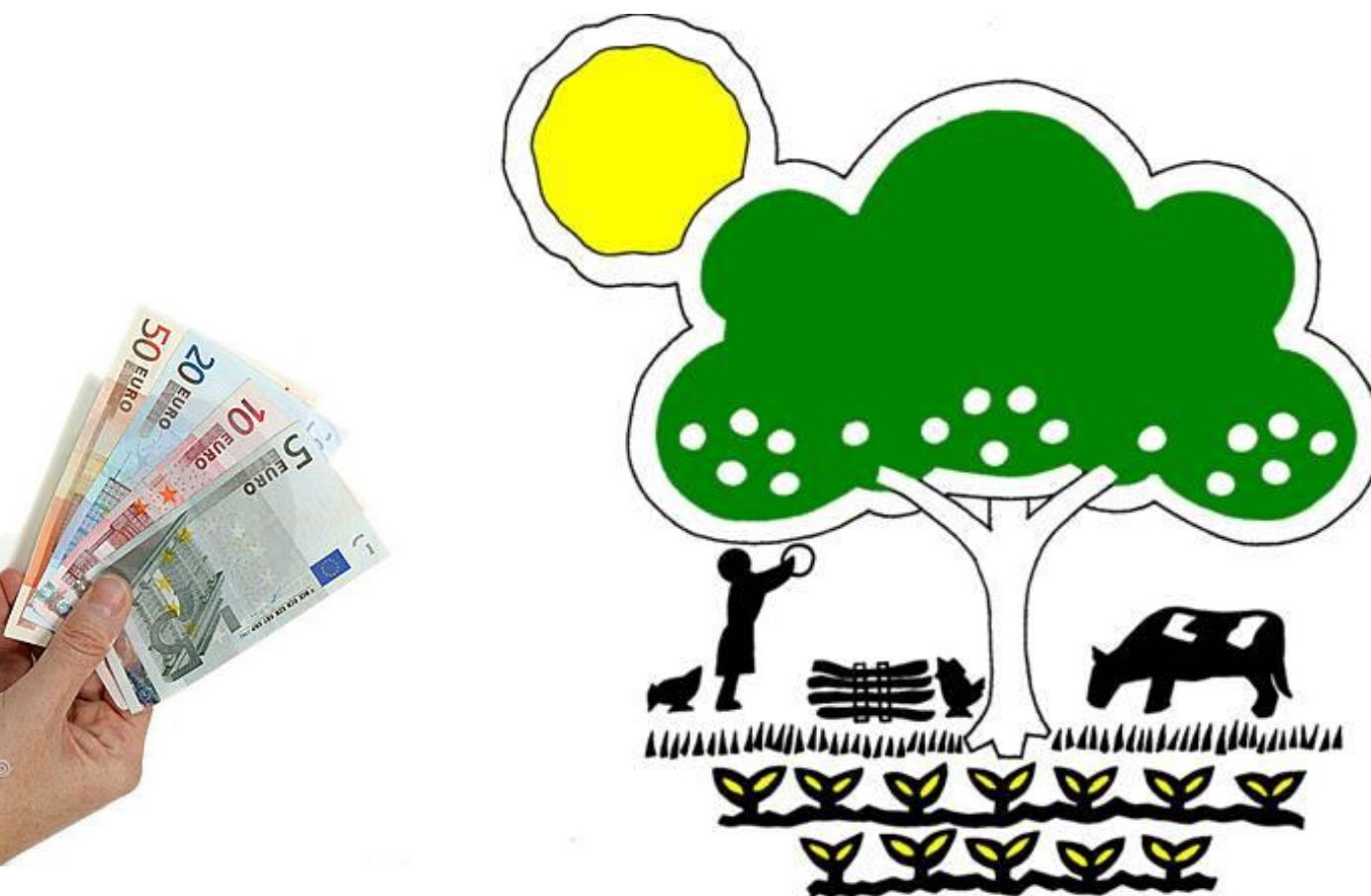


Agroforestry : A Grant Aided Future in England ?

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Current Position



- Historical lack of Policy Support
= no CAP agroforestry measures used in England
- Proposed new EU regulation for Rural Development retains support for agroforestry
- Potential for CO₂ / NH₃ emission mitigation and resource protection = new policy approach ?



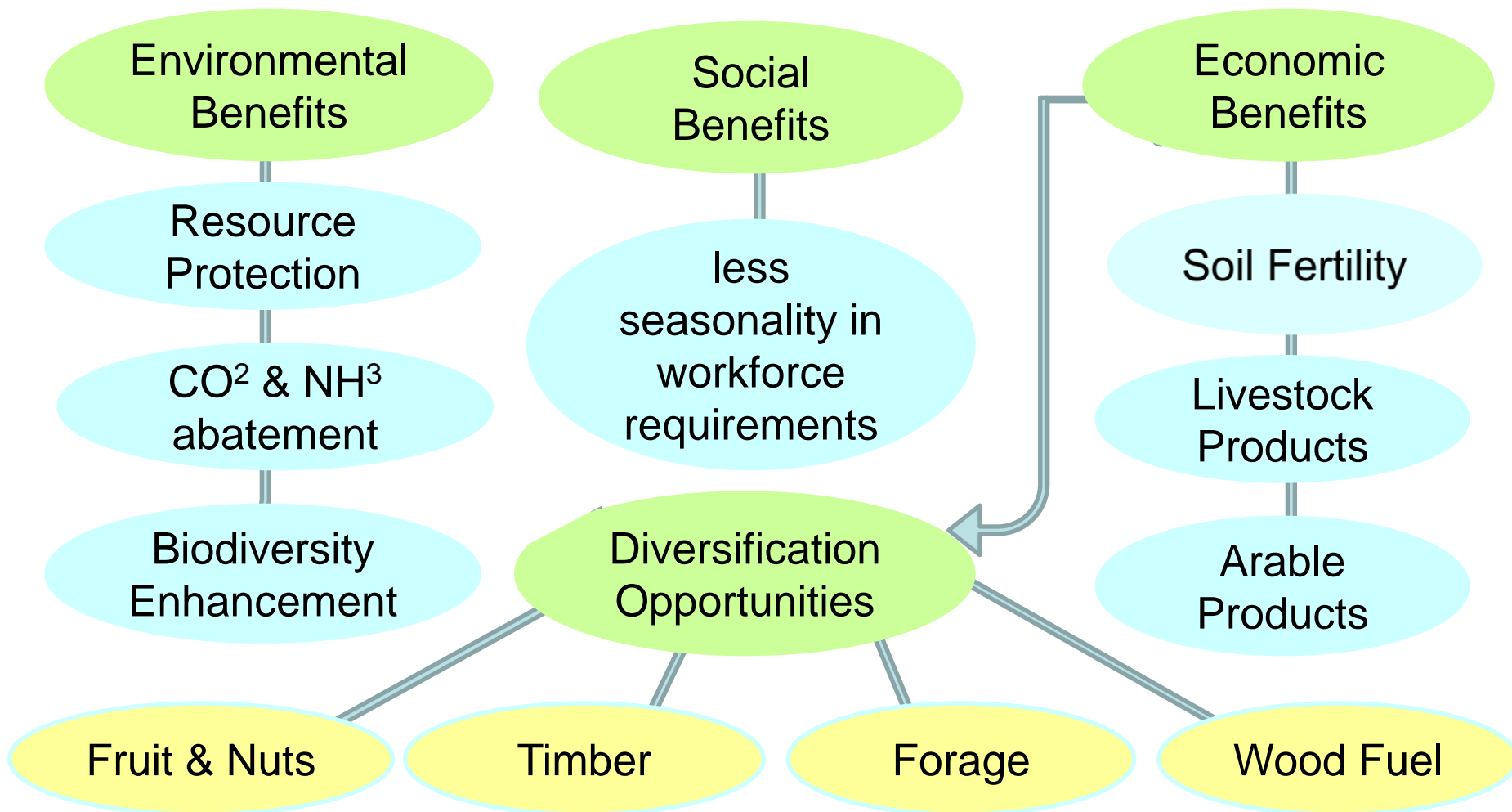
Article 24 : Establishment of agro-forestry systems



1. *Shall cover the costs of establishment and an annual premium to cover the costs of maintenance for a maximum period of ~~three~~ five years*
2. *"Agro-forestry systems" means trees grown in combination with ~~extensive~~ agriculture on the same land.*

Benefits

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Issues



Policy

Research
Needs

Training &
Advice

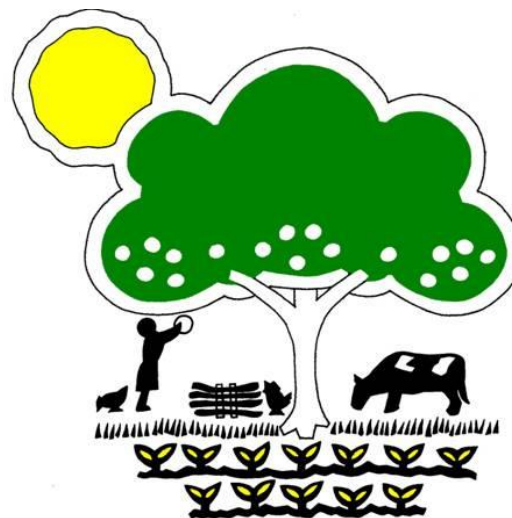
Technical
Issues

Market for tree
products

Land Tenure

Start Up Costs
/ Investment

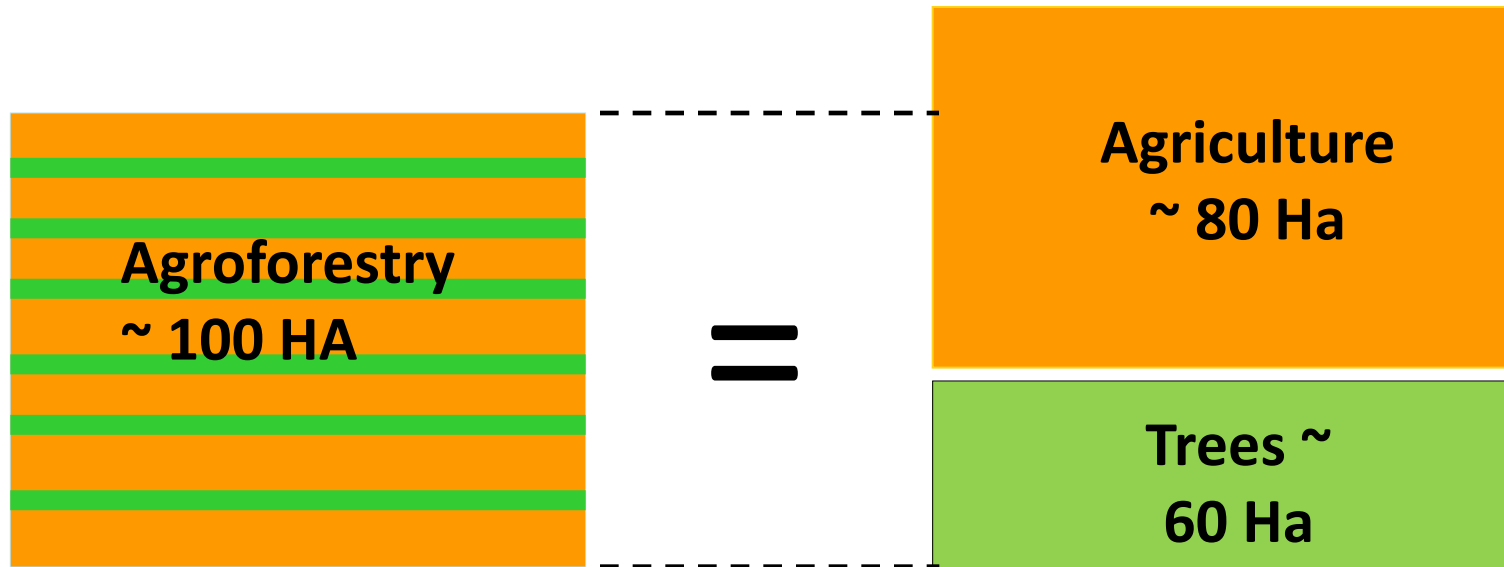
Public
Perceptions



Landscape
Impacts

What about productivity?

Land equivalent ratio



$$\text{LER} = 1.4$$

An LER of 1.4 means 100 ha of agroforestry produces as much crop & tree products as 140 ha farmland where trees and crops are separated



From Meyer (2013)*





- 75% of English farmers have heard of agroforestry
- 29% are considering adopting agroforestry
- 82% of respondents would be encouraged to adopt agroforestry if grant aid became available
- 46% of respondents would expect between £101-300/ha/yr and 36% would expect between £301-600/ha/yr.

* Meyer, C. (2013). Agroforestry: A study of farmer attitudes and perceptions in England. School of Real Estate and Planning, Henley Business School, University of Reading. MSc Rural Land and Business Management.



The Organic Research Centre, on behalf of Natural England, have produced a paper on the potential for agroforestry options to be included in the next Rural Development Programme for England.

Key consultation responses:

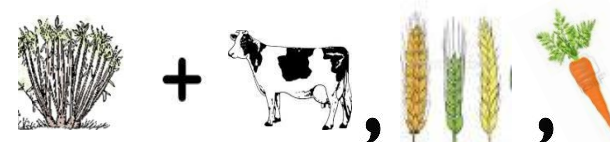
-  Little potential for integrating livestock into existing woodland due to the risk of damage
-  Silvoarable options were identified by the majority as having potential for development in the next RDPE.
-  Grassland systems with timber, coppice or fruit trees had a mixed response.
-  Upland variants identified as having particularly high potential.

Proposals for England's next Rural Development Programme

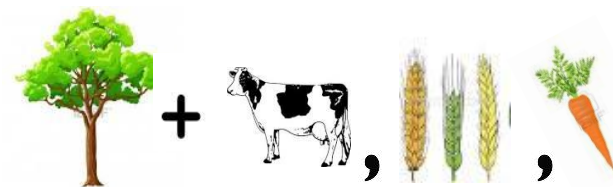


Three areas are proposed for inclusion in England's New Environmental Land Management Scheme (NELMS):

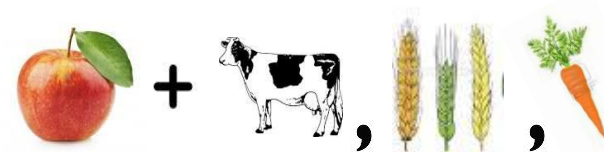
1. Agroforestry Coppice Systems



2. Agroforestry Timber Systems



3. Agroforestry Fruit/Nut Tree Systems

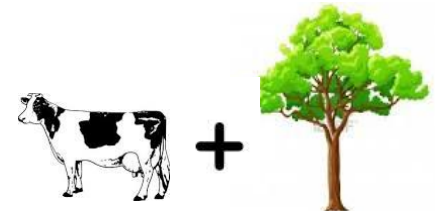
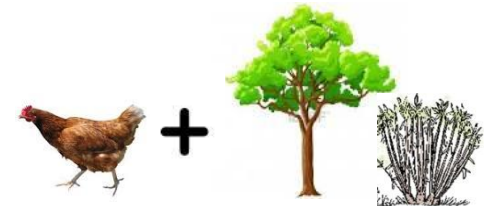


These are aimed at livestock, horticulture and arable farms.

Not Included (future potential ?)



- Poultry with trees or coppice
- Introducing poultry to established woodland
- Introducing grazing to established orchards
- Introducing grazing to established semi-natural woodlands
- Plantation woodland reversion systems



Arable with coppice



Willow SRC + Oats : silvoarable system at Wakelyns, Suffolk

Arable with timber trees



Timber silvoarable systems at Wakelyns Agroforestry, Suffolk

Grassland with Timber



Silvopastoral system on The Hollies farm in North Shropshire

Key Assumptions ~ common to all



- Trees will cover 10% of area.
- Alley cropping system with 24m wide cropping zones and 3m wide tree rows.
- In livestock situations fencing will be needed until canopy safe from browsing.

Additional Assumptions ~ Timber



- Timber
 - Annual pruning is required to maintain the value of the timber crop
 - No income from timber during establishment phase

Additional Assumptions ~ Top Fruit & Nuts



- Top Fruit / Nut
 - Extra costs will be incurred at the establishment phase and in the management of the fruit trees
 - Pest and disease control by routine spraying
 - Annual pruning will be required
 - Annual income from fruit in 3-5 years

Additional Assumptions ~ Coppice



- Coppice
 - Woodchip storage will be an additional capital cost.
 - No income from coppice during establishment phase.

Income Foregone Calculations



The ORC report includes profit foregone calculations:

- Based on from Nix 2013 and OFMH 2011/12
- **Need to be seen as indicative at present**
- Will need verification



Coppice System ~ Income Foregone



Establishment (per Ha / year for 5 years)

Arable		Horticulture		Dairy	
Non-organic	Organic	Non-organic	Organic	Non-organic	Organic
- £164	- £196	- £405	- £449	- £326	- £274

Maintenance (per Ha / year)

Arable		Horticulture		Dairy	
Non-organic	Organic	Non-organic	Organic	Non-organic	Organic
- £39	- £56	- £280	- £308	- £201	- £133

Timber System ~ Income Foregone



Establishment (per Ha / Year for 5 years)

Arable		Horticulture		Dairy	
Non-organic	Organic	Non-organic	Organic	Non-organic	Organic
- £343	- £323	- £584	- £584	- £505	- £409

Fruit / Nut Tree System ~ Income Foregone



Establishment (per Ha / year for 5 years)

Arable		Horticulture		Dairy	
Non-organic	Organic	Non-organic	Organic	Non-organic	Organic
- £489	- £564	- £730	- £817	- £707	- £712

Maintenance (per Ha / year)

Arable		Horticulture		Dairy	
Non-organic	Organic	Non-organic	Organic	Non-organic	Organic
+ £574	+ £270	+ £333	+ £18	+ £356	+ £123

The agro-forestry option intended to supplement existing woodland related options which are expected to be carried forward:

- **Energy Crops (future uncertain)**
- Woodland creation, restoration and maintenance
- Wood Pasture creation, restoration and maintenance
- Woodland Edge Management
- Woodland Fence maintenance
- In field tree protection
- Scrub creation, restoration and maintenance

Upland Wood Pasture



Glenamara Park, Cumbria

Next Steps

- Refine Options structure, prescriptions, income foregone and payment proposals
- Secure DEFRA agreement
- Include in scheme submission to EU
- Develop targeting strategy & uptake targets
- Promote to secure uptake
- Develop Technical Support and training for farmers



The ORC report for Natural England will be available in due course on the NE publications catalogue at :

<http://www.naturalengland.org.uk/publications>

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Securing DEFRA agreement is a key step, if you have any influence with DEFRA's agri-environments team

Dessus de la manche et la mer d'Irlande



3000 hectares de
systèmes agroforestiers
en cours de création
annuelle



Subvention d'appui à
l'agroforesterie disponible
via le Woodland Grant
Scheme

Evening Discussion Topic ?



*A grant Aided Future for agroforestry
in Scotland ?*



SCOTTISH EXECUTIVE
Environment and Rural
Affairs Department



Coimisean na Coilltearachd Alba
Forestry Commission Scotland