



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Agroforestry and Scheme Supports

**‘Farming in the shelter of Trees’ ,
Gurteen College
Friday 18th , November, 2022**

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District Inspector

DAFM

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Outline

- **Origins and drivers of scheme**
- **Lessons learnt**
- **New/potential supports**
- **Challenges**
- **Further information**



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Origins and drivers of scheme

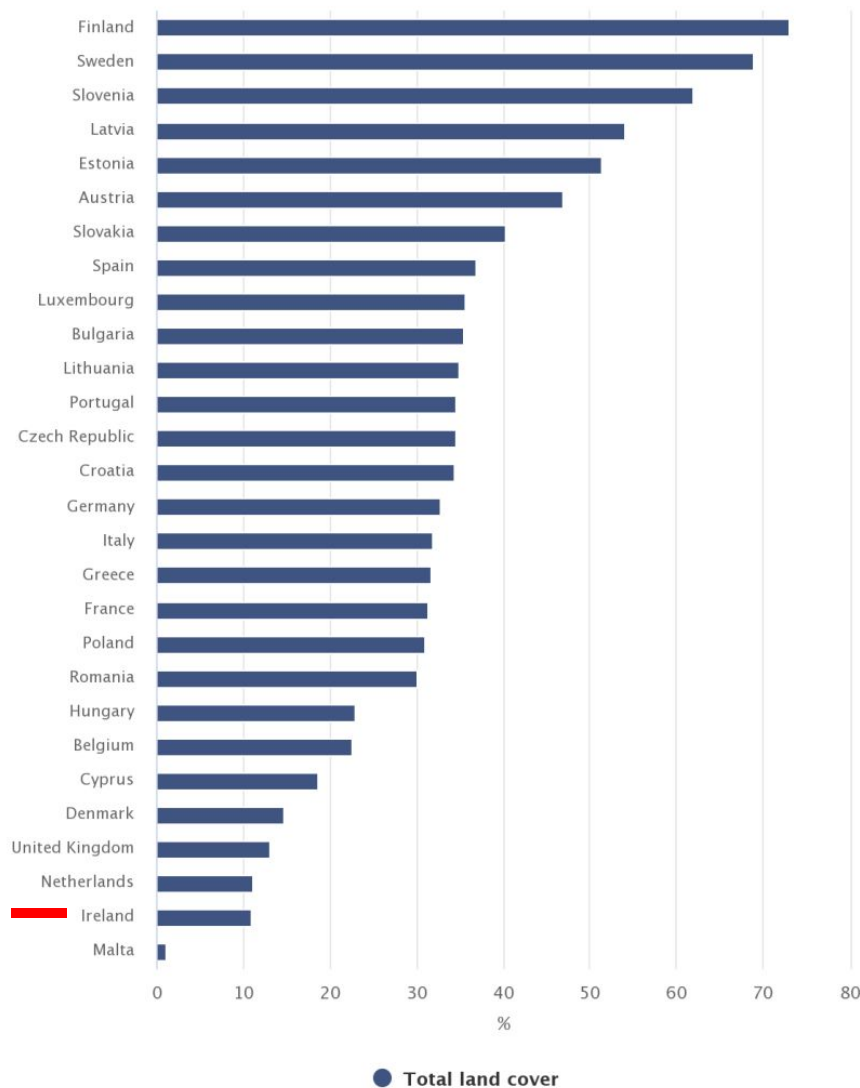


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% Forest Cover In Ireland

Forestry accounted for **11.0 %** of Ireland's total land area in 2016, the second lowest among EU Member States. EU average is close to 40%

Figure 6.1 EU: Forest cover 2016

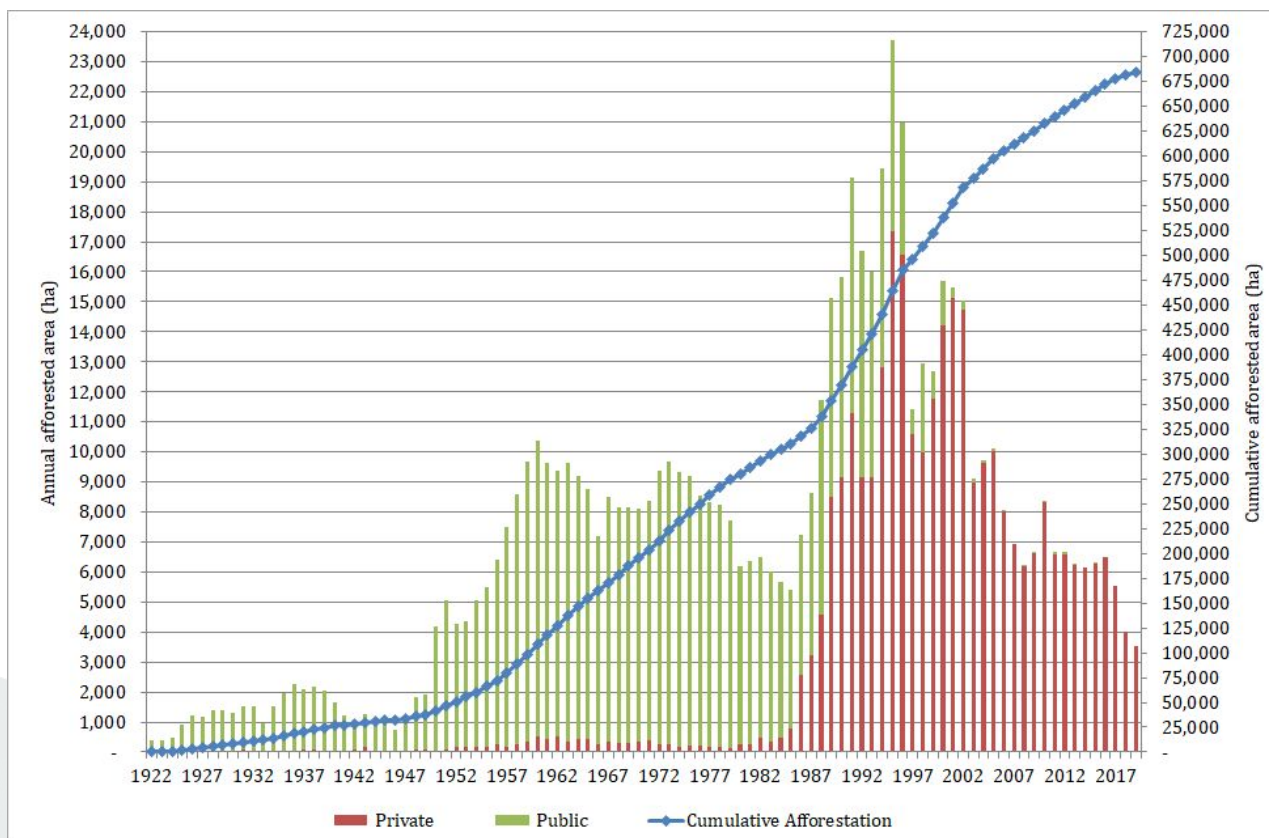


Source: World Bank



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Annual State and private afforestation (1922-2019).



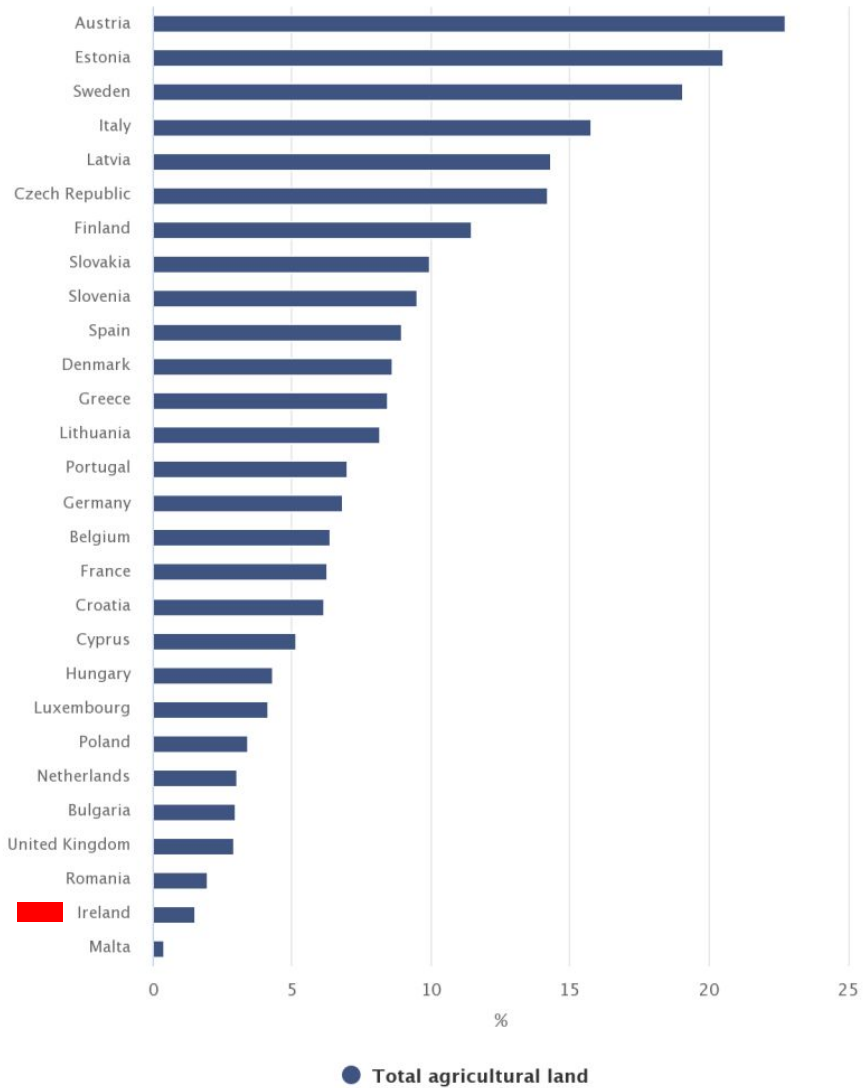


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% Organic Farming in Ireland

- Land used for organic farming in Ireland accounted for 1.5% of total agricultural land in 2017 – the second lowest percentage among EU Member States. Austria, with 22.8%, had the highest.

Figure 6.2 EU: Organic agricultural land 2017



Source : Environmental indicators Ireland 2019. CSO

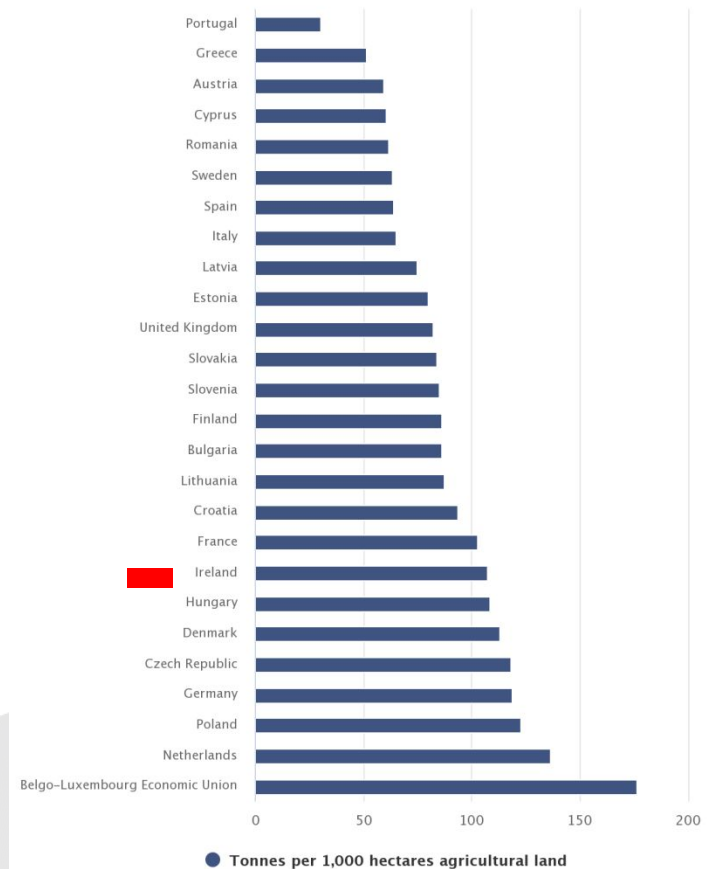
Source: Eurostat



Fertiliser Sales 2017

- Ireland had the eighth highest level of fertiliser sales among EU Member States in 2017 at 107.6 tonnes per 1,000 hectare of agricultural land(CSO).

Figure 6.4 EU: Fertiliser sales 2017



Source: Eurostat



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The Challenge

Sustainable Forestry and Food Production

- Reducing animal feeds & chemical inputs.
- Increasing organic produce.
- Off setting emissions.
- Improving animal welfare.
- Diversifying economic return.
- Increasing forest/tree cover



Low forest cover 11%



High Grass cover 59%
4th largest EU Cattle herd
7th largest EU sheep numbers



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Bridges Gap





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Agroforestry

- **Silvopastoral Systems**
- **Silvoarable Systems**
- **Forest Gardening/Permaculture/Food Forests**
- **Forest Farming**



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1. Silvopastoral Systems

- The current DAFM measure is for Silvopasture
- Based on Research in Loughgall in N.I. by Professor Jim McAdam
- Focus on grass/grazing/silage/hay.
- Acceptable animals include sheep, poultry and small calves.
- 15% fruit and nut species allowed



Ballyhaise, Cavan
TEAGASC



Kilnaclasha, Cork



Liscubba, Cork



Approximately 22 years old



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Benefits to the Farmer

- **Renewable energy/biofuel**
- **Improved animal welfare**
- **Potential for high quality timber production**
- **Sustainable food production (lower inputs)**
- **Improved biodiversity**
- **Water protection**
- **Enhanced landscapes**
- **Improved & diversified production**
- **Longer grazing season**



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Silvicultural Benefits

- **Tubes mimic side competition.**
- **Less filling in and fertilizer.**
- **Vegetation control by the animals**
- **Fewer trees to shape.**
- **Thinning intervention not as critical.**
- **Final crop trees identified early.**
- **Potential for veneer quality timber.**



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Target = 200 ha of newly-created agroforestry by 2020

**Result = 79 applications (by 2022) > 200 ha,
over 50 ha planted,
23 farmers in receipt of payments,**





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Silvopastoral Systems



Munnig North, Cork



Headford, Galway



Ballydehob, Cork



Durrus, Cork



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Silvopastoral Systems



Kilcock, Kildare



Roscarberry, Cork



Slane, Meath



Corglass, Monaghan



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Lessons learnt



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Lessons

- Plastic ties were eaten by sheep , use wire instead.
- Tubes were being crushed by sheep, second post needed.
- Augers could be used for digging holes.
- Grants not sufficient for establishment.
- Premium duration not long enough.
- Mid Term Review
- Demand for fruit and nut trees, 15% introduced.
- Headlands required if machinery is used.
- Avoid monocultures.
- Geo textiles probably best replacement for tubes.





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New/potential supports



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Afforestation Programme Supports For Agroforestry

- **Silvopastoral Systems (FT 8 was GPC 11)**
- **Silvoarable Systems (Rows less than 10 metres wide, Pilot)**
- **Forest Gardening (Pilot measure)**



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Proposed Grant & Premium Rates 2023-2027

	Forest Type	Grant Rates (excluding fencing)		Premium Payments				
		Current Grant/ha	Proposed Grant/ha	Current Premiums/ ha	Proposed Annual Premium/ha	Current Number of Premiums	Proposed Number of Premiums for Non- Farmers	Proposed Number of Premiums for Farmers
FT1	Native Forests	€5,620	€6,744	€665	€1,103	15	15	20
FT2	Forests for Water*	New	€6,744	New	€1,142	New	15	20
FT3	Forests on Public Lands**	€9,920	€11,044	n/a	n/a	n/a	n/a	n/a
FT4	NeighbourWoods***	€8,800	€10,200	New	€1,142	New	15	20
FT5	Emergent Forests	New	€2,500	New	€350	New	15	20
FT6	Broadleaf, mainly oak	€5,620	€6,744	€645	€1,037	15	15	20
FT7	Other Broadleaf	€3,595	€4,314	€605	€973	15	15	20
FT8	Agroforestry	€5,620	€8,555	€645	€975	5	10	10
FT9	Seed Orchards	New	€10,000	New	€1,142	New	15	20
FT10	Continuous Cover Forestry	New	€5,421	New	€912	New	15	20
FT11	Mixed High Forests: Conifer, 20% broadleaves	€3,710	€4,452	€590	€863	15	15	20
FT12	Mixed High Forests with mainly spruce, 20% broadleaves	€3,215	€3,858	€510	€746	15	15	20
Native Tree Area Scheme will be paid at FT1 and FT2 rates. Premiums will be paid over 10 years rather than 20 at a rate of €2,206 per ha annually for NTA1 and €2,284 per ha annually for NTA2								
*	Additional payment of €1,000 per ha will be paid to landowner on completion of planting							
**	Grant includes Trails, Seats & Signage Facilities and Derelict Site payment							
***	Grant includes Facilities payment							



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Agroforestry Payments.

Grants – Old rate 5,620, New rate 8,555
These figures do not include fencing rates.

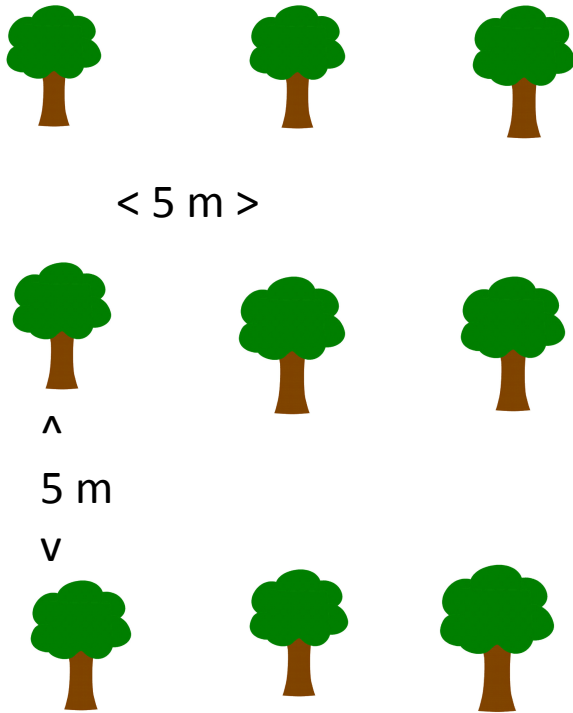
Premiums – Old rate 645 , New rate 975
Premium duration – old rate 5 years, new rate 10 years
(for farmer and non farmer)



Designs

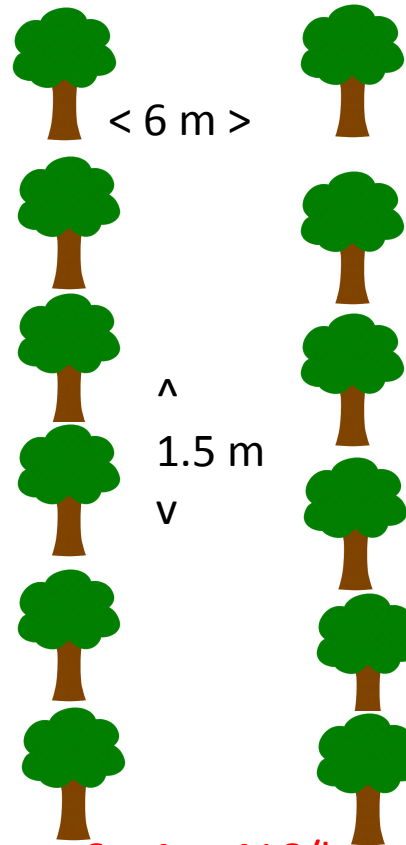
Singly

400 plants/ha



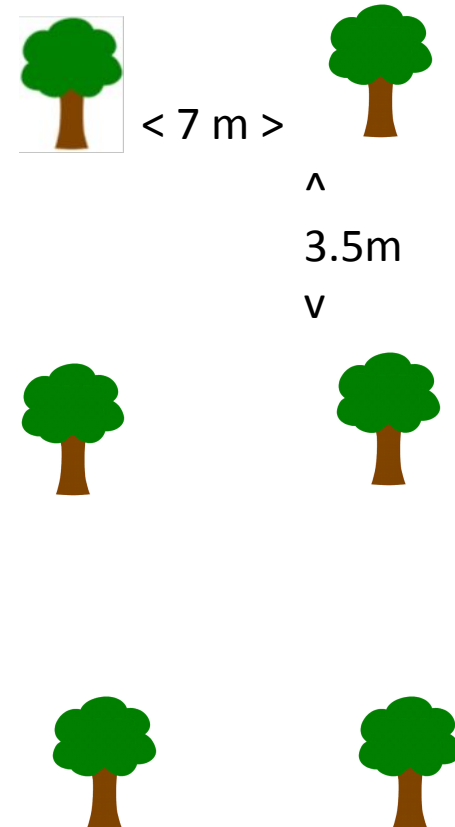
Rows

1111 plants/ha



6 x 4 = 416/ha

408 plants/ha



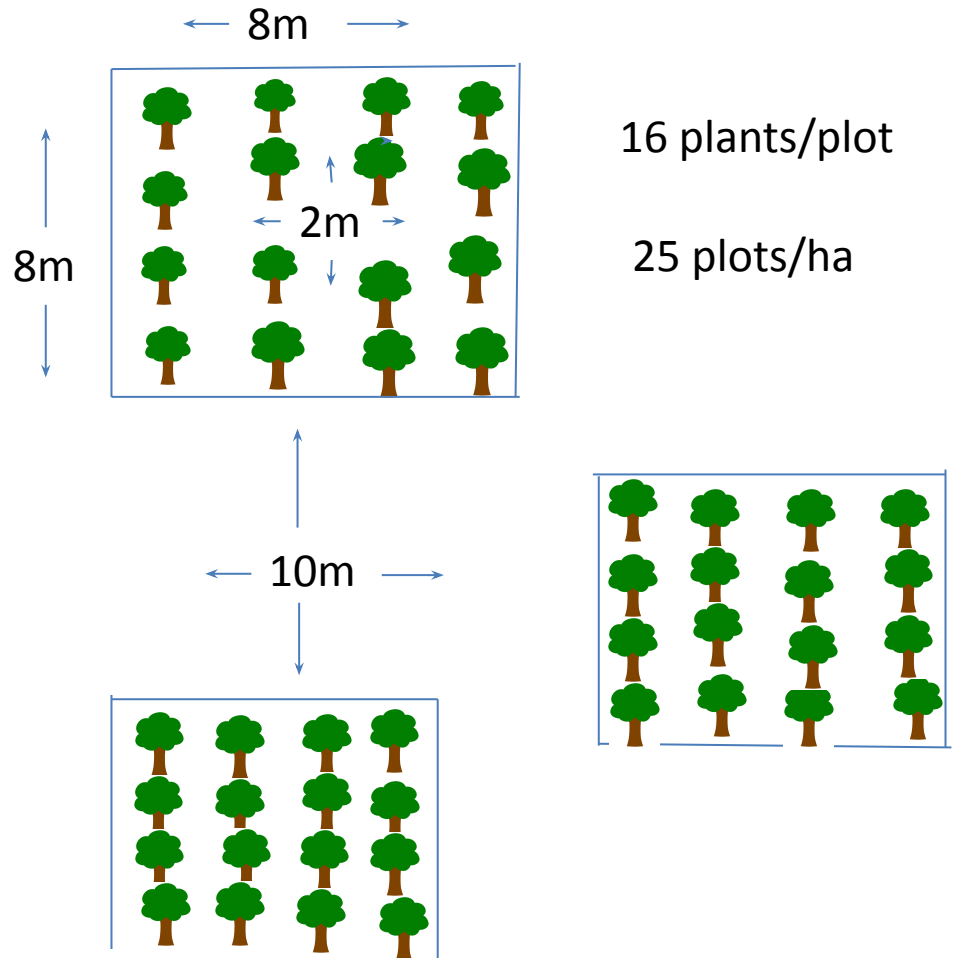


Designs



Suitable for Cattle

Groups (400 trees/ha)





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Sustainable Forest Management Scheme

Proposed €1,200 /ha

- **Replace Tubes with Geotextile mesh.**
- **Remove or replace second post.**
- **Formative shaping.**





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2.Silvoarable Systems

(Pilot - 30 ha /year , grant rates to be decided)

Growing crops amongst trees (mostly rows)



Cereals



Fruit



Vegetables



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Silvoarable Systems



Ireland (Alan Kingston)

Timber species + Aronia Berries

A kilometer of Aronia (10 rows , 8 metres apart)

2 years old & full production in 3 years time.



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Silvoarable Systems (cont.)



Frozen Aronia berries + Small pigs



**Silvopasture – 1st Stage -Silage
(soft shelters/no grazing)
2nd – Shropshire sheep**



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Silvoarable Systems



Germany –
Poplar, Robinia, Corn, potatoes, wheat



Greece –
Olives /Barley



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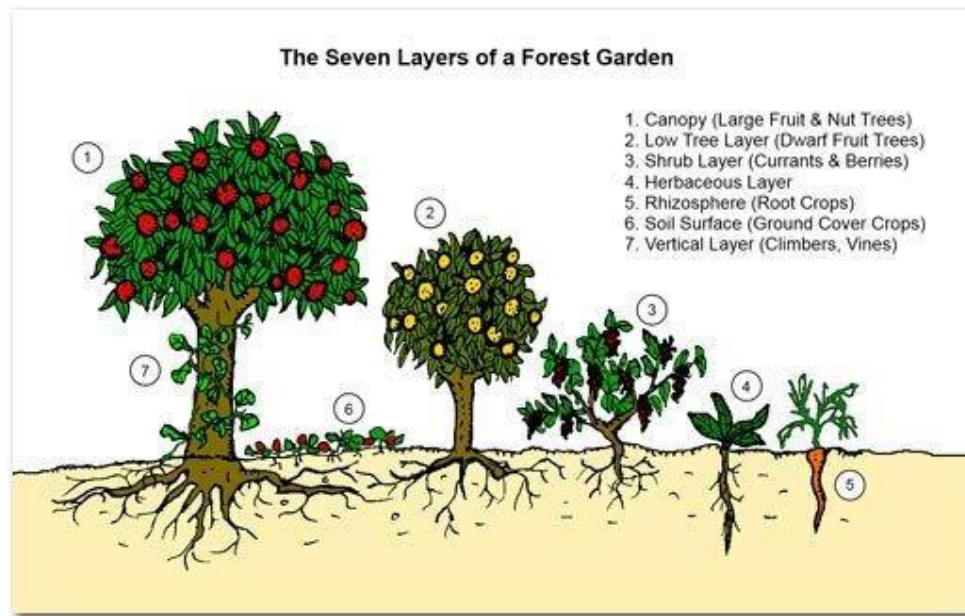


Holland
Elderberry & Vegetables



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3. Forest Gardening



Forest Gardens are probably the worlds oldest form of land use and most resilient agroecosystem. Pioneered by Robert Hart in the 1980s in the UK.



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Forest Gardening

**Pilot measure , 6ha/year, 1ha plots, grant rates to be decided.
Initial design is crucial**



Holland - Funding from a water authority.

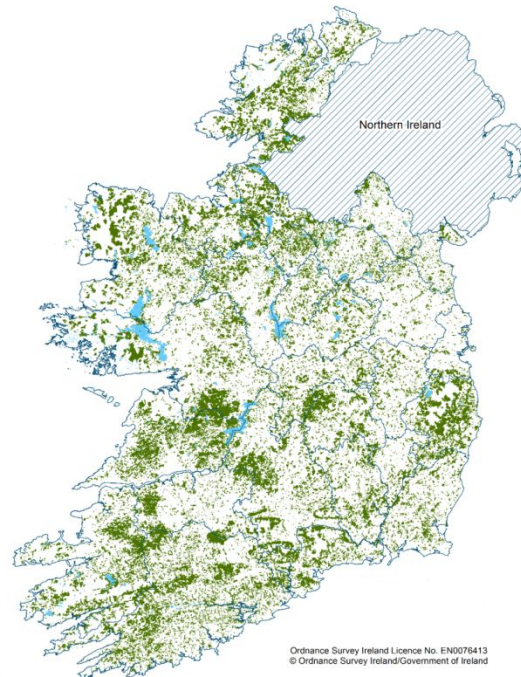


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4. Forest Farming

Currently not grant supported

Utilisation of existing plantations for food production



Forest cover in Ireland.



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Forest Farming



Non Timber Products

- Game & farm animals
- Nuts, seeds, berries.
- Mushrooms e.g. truffles.
- Sap products,
- Honey
- Forage / Foliage,
- Medicinal plants- oak, lime, conkers, wild garlic, (woodland trust)
- Fuel,
- Tourism (37 million forest visits annually)
- Carbon sequestration



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Forest Farming

Fungi

- A survey in 2007, 29 edible fungi from 53 woodland sites.
- 33% of the woodlands produced edible fungi.
- Broadleaf woodlands were more productive than conifers.
- Hedgehog fungus, honey fungus, wood blewit and cep were the most frequent fungi found.
- Tom Harrington/Maria Cullen (COFORD)





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Forest Farming Coppicing

- Mainly Willow/hazel

Uses

- Fencing,
- Charcoal,
- Thatching,
- Fuel,
- Basketry,
- **Tree fodder,**



Tree to be
coppiced

Cut close
to base
in winter

Shoots rapidly
regrow from
stool the
following spring

Coppice ready
for harvest
between 7-20
years



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Silvopasture after premiums are completed.



Photograph – Liam O'Connor, Killarney, 2022



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Ash die back – RUS scheme

Agroforestry is an Option





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ACRES

(Agri-Climate Rural Environmental Scheme)

General Measure €7,311

Co-operation Measure €10,500

- **Creation of Traditional Orchards**
- **Planting trees in riparian zones**
- **Tree belts for Ammonia capture**
- **Tree planted singly, in rows (less than 0.1 ha and > 12 m apart) or in groups.**



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ECO scheme

3 trees per hectare

e.g. Parkland Single trees >20 metres apart





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Challenges

- **Training / Education – of practitioners.**
- **Research – All aspects**



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Field Days – Very important



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Further information



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Irish Agroforestry Forum

**Membership now
open – Please join !**



Irish Agroforestry Forum-
<https://irishagroforestry.ie/>



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Further information-

DAFM =

www.gov.ie/en/publication/642e6-forestry

Irish Agroforestry Forum-

<https://irishagroforestry.ie/>

Farm Woodland Forum =

<https://www.agroforestry.ac.uk/>

European Agroforestry Federation (EURAF) =

<https://euraf.isa.utl.pt/>





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Thank You

