

From Pasture to Protection: Ireland's Farms 1975-2024, the role of Agroforestry in Transforming Farms for the Climate Crisis.

What, Why and How!

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Trees on the Land



Silvopasture-AFBI Loughgall

Changing Face of Agriculture

- People had huge impact on environment
- 80% of land area in Ireland is farmed
- It was moulded over the centuries into mosaics of small fields and diverse landscape dominated by pastoral agriculture
- Shaped also by land quality, climate and history

History of Land Use

Forest Clearance

It was said that a squirrel could travel from one end of Ireland to the other without ever touching the ground as more than 80% of the land was covered by forests.



Mixed Farming but intensive post WWII

Accession to EEC 1975. CAP led to increased stocking.

Change in practice

Extensive Mixed to Intensive Grassland Production

Supported Agricultural System

Highly Regulated

Did it protect water?



Farming Story

Kerry Dairy/Pigs/Suckler to Beef/Sheep/Wool

Extensive hill/marginal,
very few inputs, local and
export markets, milk
contract. Water protected.

Cork Dairy/Market Gardening

Lowland. Kerry cows - milk,
butter/Market
Gardening/Intensive Tillage.
Potatoes, Grain, Cabbage,
Beet, Strawberries even
Blackberries! Local Markets
Water - there was none,
rainwater only.

Limerick

Northern Ireland

USA

Low Input Intensive

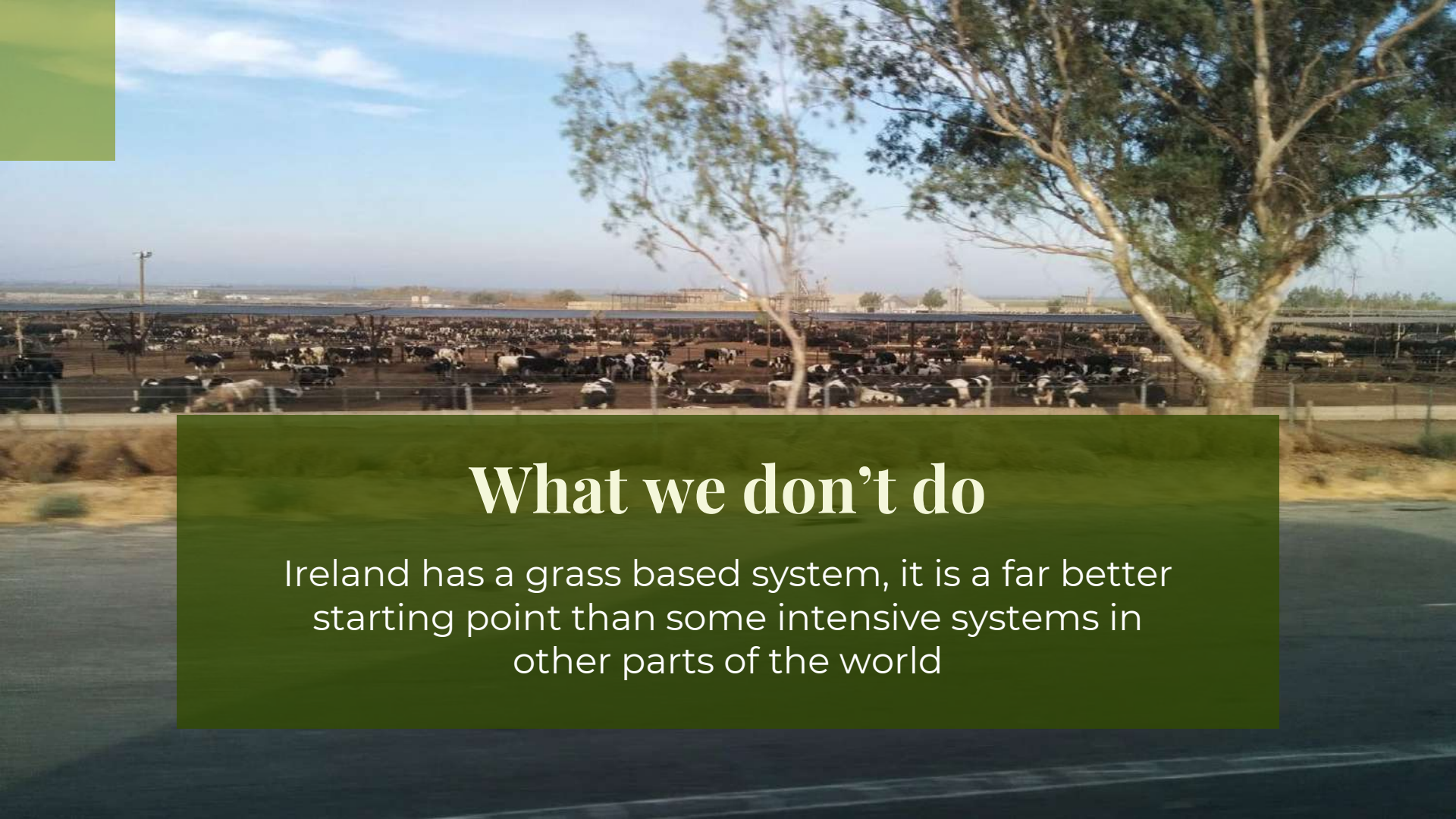
Lowland Grass. Beef
Production, Hay. Market local
and export. Water-not
protected but not a problem
as low input.

Intensive

Intensive linked to farm size,
markets, CAP payments. Poor
Water quality management?-
Lough Neagh

Intensive

Feedlots, Intensive, Industry
Control. Water - pesticides, heavy
metals, fertiliser, organic solvents,
petroleum.

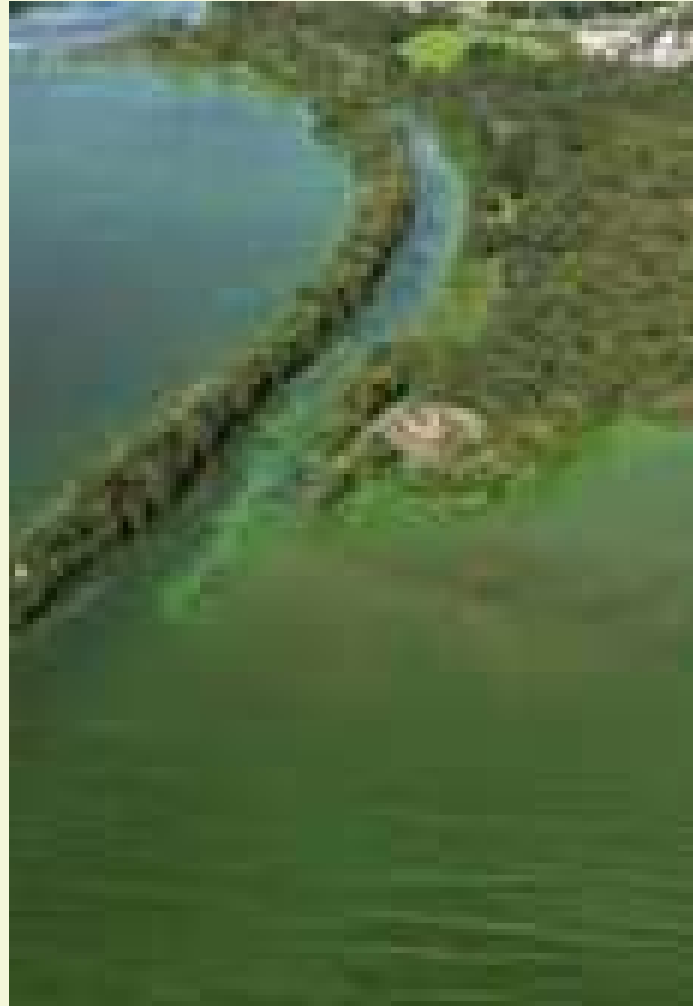


What we don't do

Ireland has a grass based system, it is a far better starting point than some intensive systems in other parts of the world

The problems that intensive agriculture contribute to:

- Biodiversity loss
- Climate Crisis
- Pollution
- Reduced Food Security??
- **Water Quality e.g Lough Neagh**



Risk!

- Silage Effluent
- Farm Yard run off
- Slurry
- Artificial Fertiliser
- Pesticide
- Herbicide



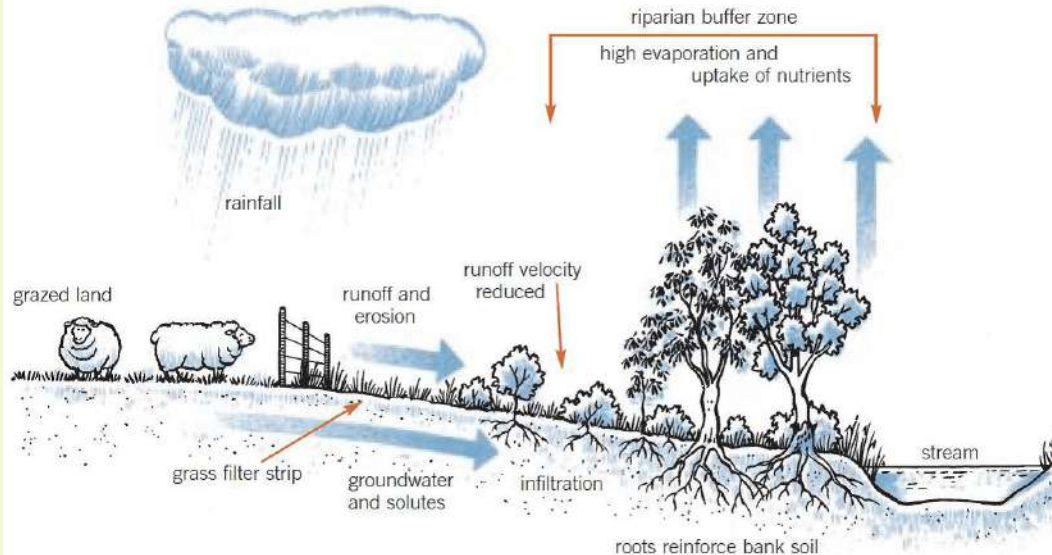
The Human Side of Change

- What is the reality?
- Is change easy?
- Possible without supports?
- Policy change
- Regulations

Trees to the Rescue!

Water Protection Processes

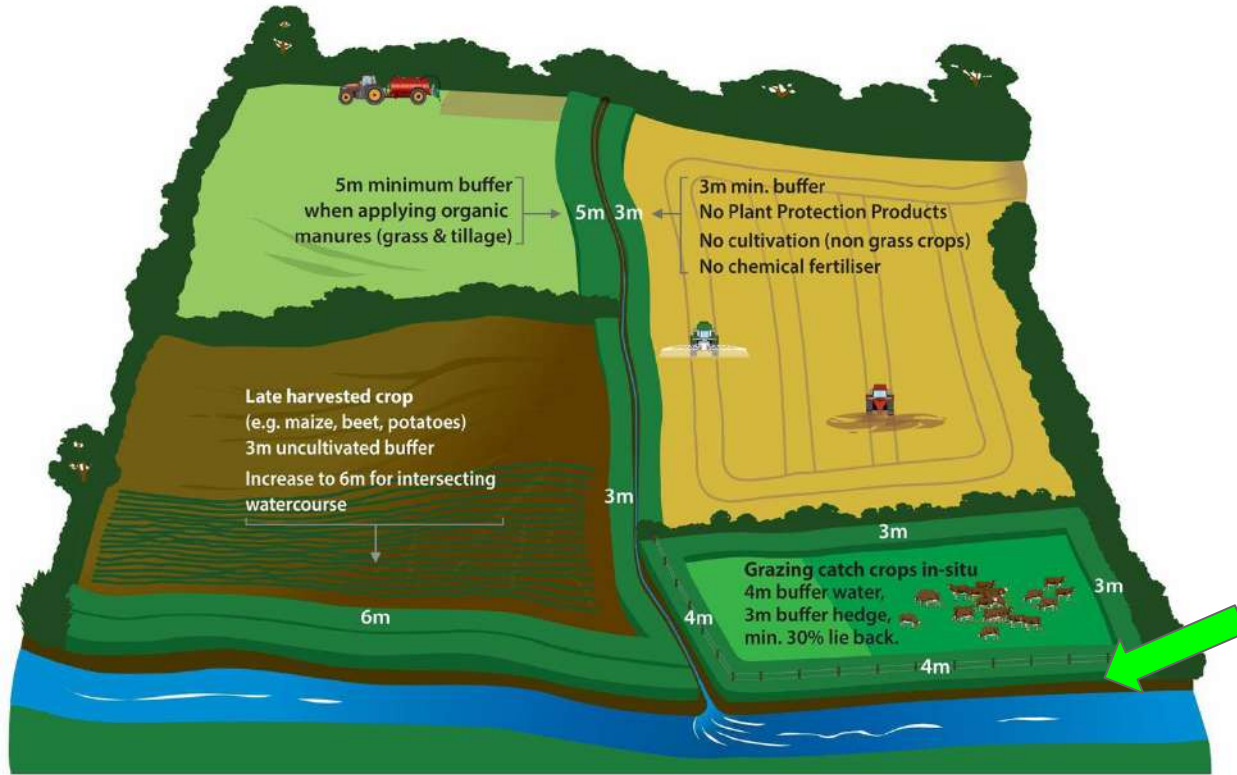
Processes that occur in the riparian zone to improve water quality and stabilise streambanks. Illustration Paul Lennon.



- ❑ Trees have deeper roots than pasture grass
- ❑ Better nutrient cycling
- ❑ Absorb nutrients that might otherwise leach away
- ❑ Prevents soil erosion

<https://www.teagasc.ie/about/farm-advisory/advisory-regions/cork-east/farming-for-water-quality---assap/riparian-margins-and-fenced-buffer-strips/>

Minimum Buffers Zones to Protect Water



Hedgerow Network

Not just habitat!

Should be recognised as agroforestry providing valuable shelter/shade/welfare/drainage-soil/water benefits

Need Trees Here Too!



Extended Grazing Season!



Slurry

More Time Outdoors

- Can extend the grazing season 14 to 17 weeks
- Reduced Slurry Production
- Ammonia Abatement- including absorption by tree canopy
- Improved welfare - improved production and product





Water Protection Policy and Support



Effective policies, increased research, **demonstration** activities, **farmer training**, and awareness are crucial for promoting agroforestry. Grants!!

Adequate supports for establishment and maintenance. **Subsidies for ecosystem services** including water protection provided by diverse and sustainable agricultural systems are essential.

Support payments and Training



Supports FT8

- Silvopastoral Systems (FT 8)
- **Establishment grant - €8,555/ha (75% yr 1 and 25% yr 4).**
- **Premium €975/ha/year for 10 years.**
- Silvoarable Systems (Pilot)
- Forest Gardening (Pilot)
- Others - Acres/ Ecoscheme /Trees on the Land



The Irish Agroforestry Forum

- Membership €30

Its mission is to promote, support, and advance agroforestry practices across the island of Ireland.

- Agroforestry as a multifunctional land use option that integrates trees into agricultural and horticultural systems at a range of levels and spatial orientations, to sustainably produce nutritious, wholesome food and quality timber while delivering a wide range of ecosystem services.

How can the Forum help



What we can provide?

- Initial advice, advice on process and decision making
- Explain benefits for your farming enterprise
- Resources, information and direction
- Find an answer - who should you talk to?
- Knowledge transfer and training
- Farmer to farmer learning

Thanks

“All the water that ever will be, is now” National Geographic

"Water is critical for sustainable development, including environmental integrity and the alleviation of poverty and hunger, and is indispensable for human health and well-being." - United Nations

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