FROM GAELIC PASTORAL SYSTEMS TO CAP SUPPORTED EXTENSIVE LIVESTOCK PRODUCTION



James Moran

Outline

- Setting the scene: 350 years of socio-economic and landscape change
- HNV Areas of Ireland
- Extensive Livestock Production
  - Western Hill Sheep Production
  - Burren Extensive Beef Production
- Vision for CAP supported HNV system

The Gaelic Pastoral System

- Self Sufficiency
- Gaelic legal code governing society (Detailed Written Law Texts 7th & 8th Century)
- Cattle = Currency
- Free Elite: Hierarchy of nobles (Kings and Lords) – Apprentice farmer (14 ha grazing)
- Unfree (bound to land): cottiers, tenants and serfs
- Relatively prosperous rural economy (i.e. enough food for all)
- Regularly undermined by political strife, weather and disease.

Source: J. Feehan (2003). Farming in Ireland. History, Heritage and Environment. University College Dublin.

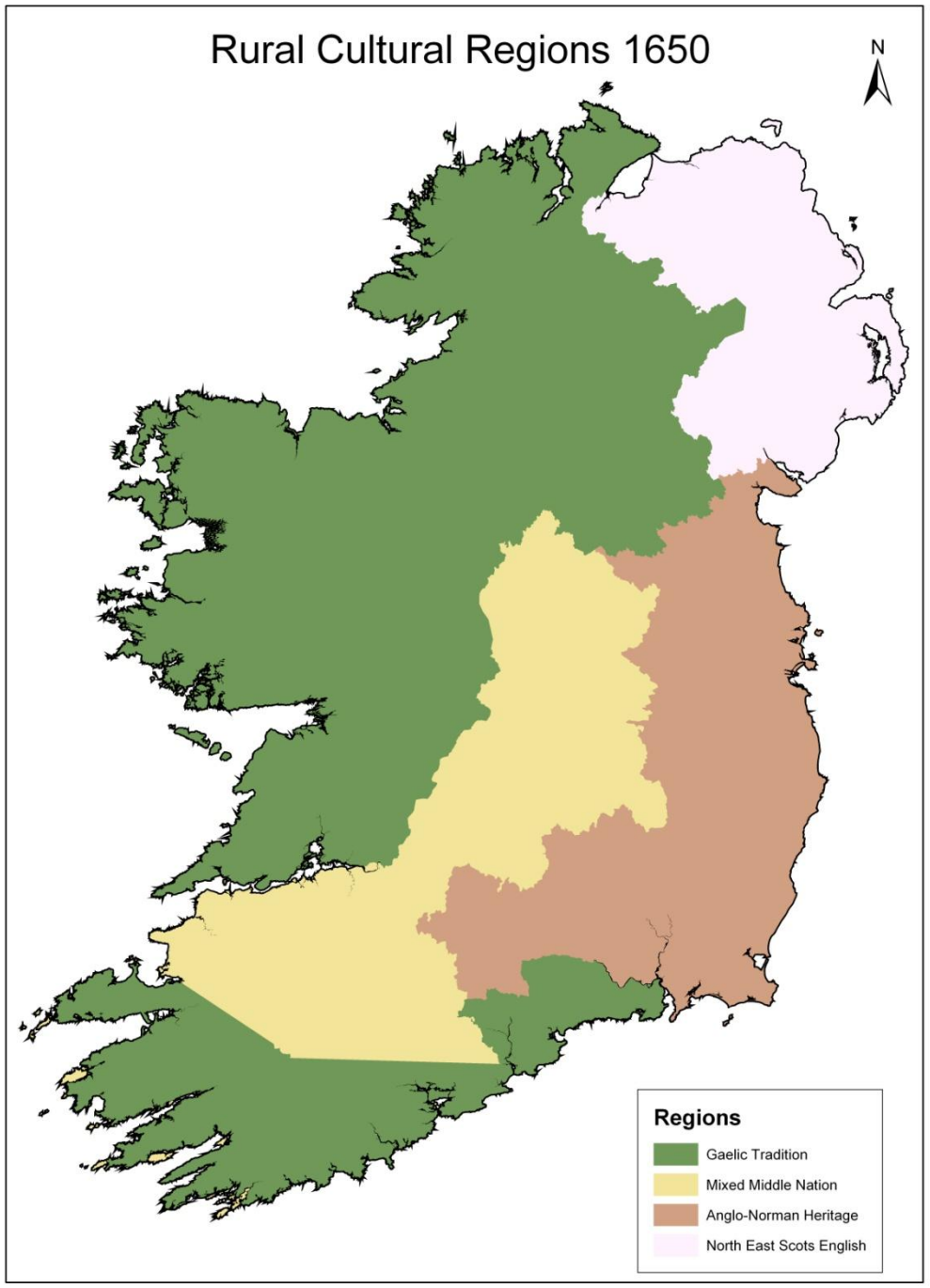
The Gaelic Pastoral System

- Year round grazing systems (no meadowing)
- Mainly dairying, also pigs, sheep, horses
- Farm size 28ha-280Ha. Home farm and summer milking lands (wetlands and foothills). Mountain grazing open to all
- Dairy diet: >20 milk drinks, curds, butter and cheese
- Blood drawn to drink
- Farmstead: fertile ground for cultivation (<1%of holding), outfield for grazing, access to common lands and water
- Monasteries: Arable important

Source: J. Feehan (2003). Farming in Ireland. History, Heritage and Environment. University College Dublin.

350 years of Change

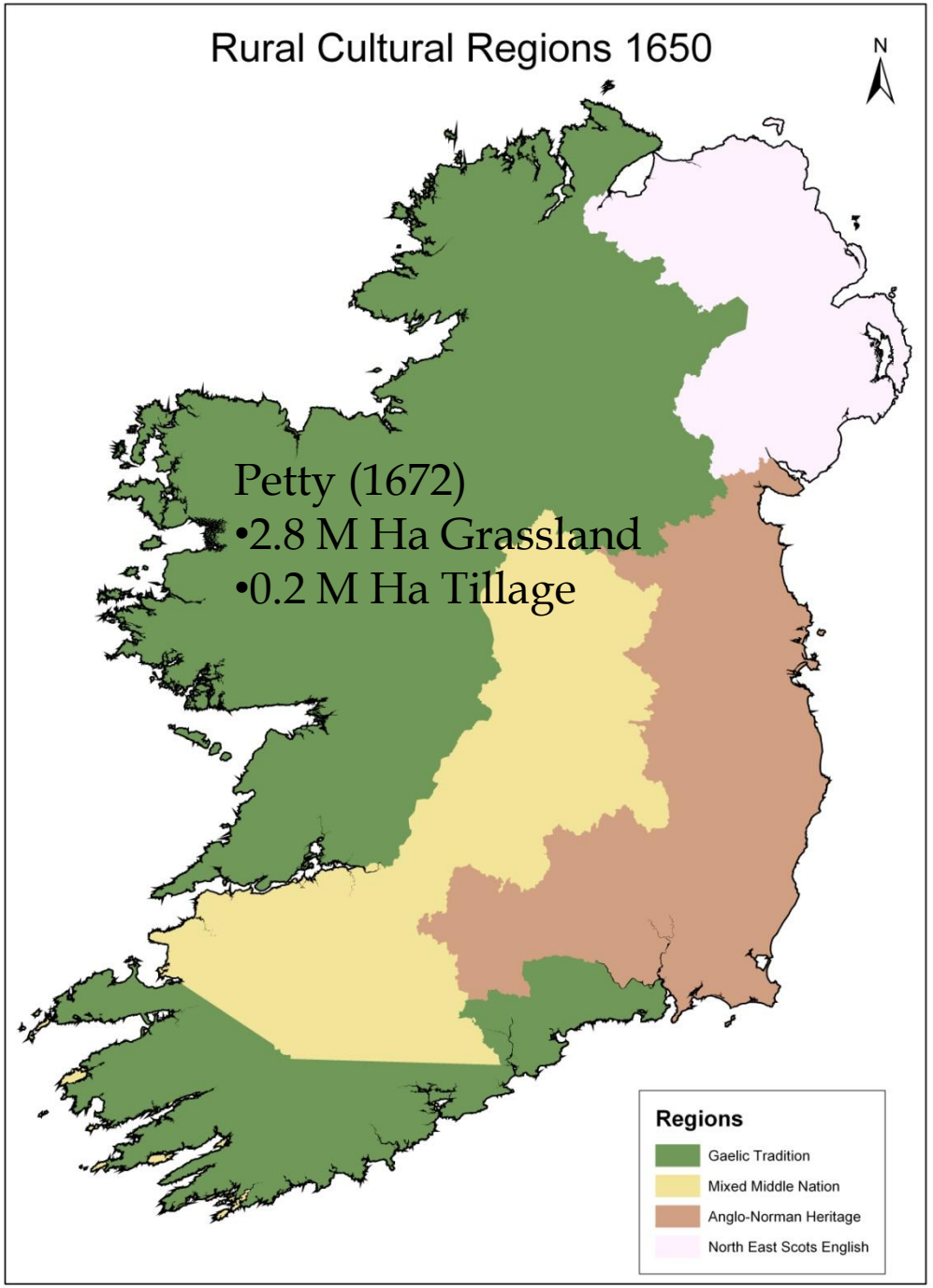
- **Anglo-Norman Tradition** (East): Better soils, arable, cattle and sheep, large open field system/village settlement
- **Gaelic Tradition** (West/South-West): predominantly gaelic pastoralism (in decline), no nucleated settlement (monasteries exception)



Ref: J. Feehan (2003). Farming in Ireland. History, Heritage and Environment. University College Dublin.

350 years of Change

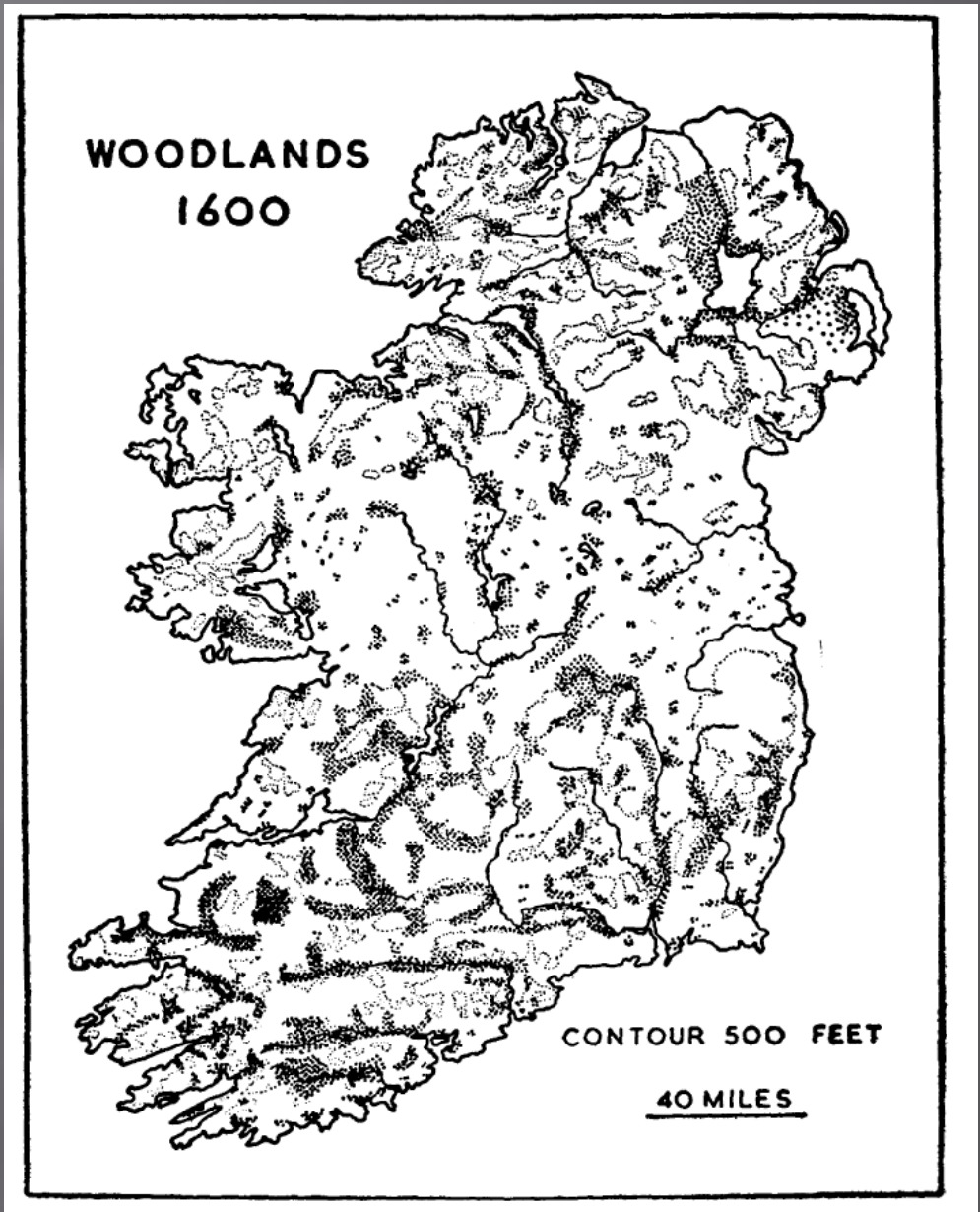
- **Mixed Tradition** (Midlands): Mixed soils, arable, livestock, village settlement. More intensive than gaelic areas. Local variation.
- **Scots-English Tradition** (North-West): New Plantations



Ref: J. Feehan (2003). Farming in Ireland. History, Heritage and Environment. University College Dublin.

Woodland of Ireland 1600

- Landscape a mix of open pasture, wood pasture, woodland and ebb and flow of scrubland.
- Large areas of peatlands and wetlands



Source: E. McCracken (1959). The woodlands of Ireland Circa 1600. Irish Historical Studies. 11 (6) pp 271-296

1650-1699

- War 1641-1653:
  - tillage completely abandoned.
  - 75% of all cattle destroyed.
  - 25% - 80% people dead (war, famine and disease).
  - 80% of best land “lay waste and uninhabited”.
  - Extensive areas reverted to scrub.
- Relatively rapid recovery
- Main export later half of century: cattle, wool, corn, butter and fish (2,000 tons salmon/year), large quantities of timber
- End of century
  - Population grew to 1 million
  - Land privatised

18th Century

- Reluctant agricultural revolution
- Growing population
- Increasing importance of drystock
- Exports: linen, wool, beef, butter and pork.
- Potato : staple diet for 75% of pop.
- Largely unenclosed at beginning of century.
- Gaelic system still prevalent in western areas
- Woodland disappears – pipe staves, barrels, charcoal for ironworks (10-15% in 1600s to approx. 1% in 1800s)
- Turn to peatlands for fuel.

19th Century

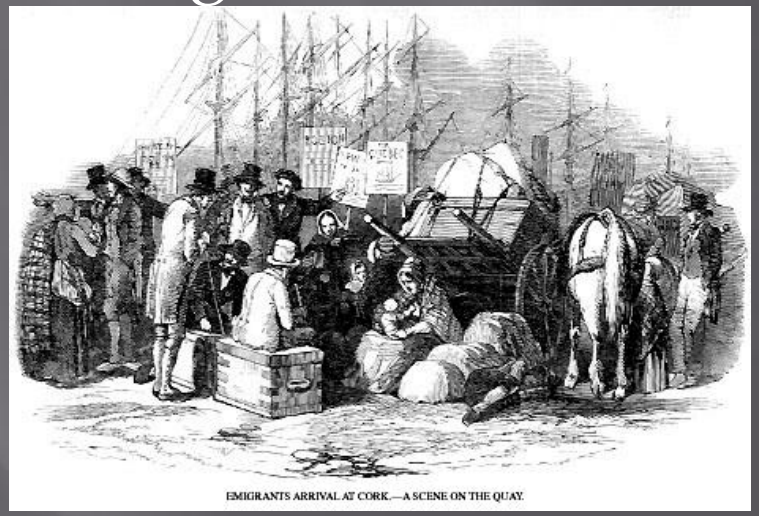
- Rapidly growing population (1M 1600 to 8.1M 1841)
- Facilitated by and dependant on potato for subsistence
- Reclamation schemes and further enclosure
- 0.8M Ha potatoes, oats as cash crop
- Gaelic pastoralism on marginal land replace by large pastoral estates – large expanses grazed by cattle managed by few herders (large sheep herds in limestone lowlands)
- Large Demesne Estates – mixed agriculture (better soils)

19th Century: Clachan system (Rundale)

- Communal lease on marginal land
- Houses and byres at centre
- Unenclosed tillage infield (oats and potatoes), outfield, then common grazing each shareholders allocated number of "collops" for sustainable grazing
- Seaweed and sand used as fertiliser
- Income supplemented by cottage industries (weaving, knitting, sale of turf, seaweed)
- Population increase, breakdown in system – overstocking, soil impoverishment
- Sub division of land, smaller more fragmented holdings
- Dependence on "Lumper" potato

Famine (1845-1849): Disaster waiting to happen

- Human tragedy, socio-economic watershed with far reaching political repercussions
- Pop decline 1841 (8,196,597) to 1861 (5,798,967)
- 1 million died, >1 million emigrated
- Recurring blight, famine (west)1879, 1889-1890.
- Remodelling of Irish Agriculture



EMIGRANTS ARRIVAL AT CORK.—A SCENE ON THE QUAY.

BRIDGET O'DONNEL AND CHILDREN.

Post Famine

- Number of cattle and sheep doubled
- Depopulation of western hills
- Increase in large scale sheep farming: Cheviot and Scottish Black Face
- Irish landlords under political and economic pressure
- Land Acts 1860-1933, change in ownership
  - 130,000 landlords in 1870, 500,000 tenants
  - By 1933 6M ha changed hands to make 450,000 holdings

Congested Districts Board and The Western Problem!

- Established in 1891 in response to socio-economic situation in west
- Promote infrastructural development and modernisation of agriculture
- Second wave of compulsory purchase to redistribute land into viable holdings
- CBD ladder farm replace more informal clachan system
  - Aim: holding of 9-12ha
  - 7 ha potential arable and commonage grazing
  - Farms with regular fields, new farmhouses and roadways
- "Model of social reform: inclusive, democratic, progressive, agenda determined by local and regional needs" Feehan 2003

1940s-2010

- Modernisation and intensification of agriculture
- Associated environmental consequences
- Join EU in 1973
- CAP-Headage payment and unsustainable growth in livestock numbers
- High nature value farmland areas still remain
  - Centred on Gaelic tradition areas of 17th century
  - Marginal land
  - Worst hit areas during the Famine
  - The congested district areas of the early 20th century
  - Ravaged by unsustainable grazing practices, direct result of CAP headage payments
  - Time we had a sustainable solution to "Western problem".

Traditional Management of HNV Areas?

- Gaelic pastoralism, Clachan-Rundale, CBD-Ladder Farm (war, famine, disease to improved socio-economic situation)
- Current conservation management advocates traditional management techniques.
- Originally developed to meet needs of people within the prevailing regional environmental constraints.
- Effectiveness of traditional management practices?
- Marrying science with traditional knowledge to develop sustainable management practices.
- HNV Areas not fossilised
- The current situation

HNV Farmland Regions
Republic of Ireland

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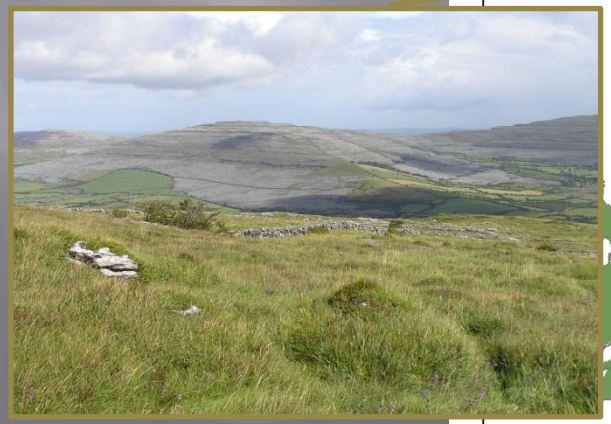
- Physical limitation - soils, topography, climate and remoteness
- High biodiversity, landscape and socio-cultural values
- Under threat



HNV Republic of Ireland

High Concentration

Low Conentration

Hill Sheep Socio-Economics

- Farm profile:
  - Farm sample = 38
  - Average farm size 43ha approx.
  - >50% rough grazing/commonage
  - Average livestock units = 28
  - Blanket bog, heath and upland grassland

Data Source: NFS 2009

Financial Viability

Variable	sub-totals	Totals
Livestock and crop output		€7,162
Subsidies		
SFP	€7,801	
Agri-env	€5,234	
DAS	€3,070	
Other	€790	
Total Subsidies+other		€17,019
Total Gross Output		**€24,181**
Direct costs		€5,391
Overhead Costs		€6,247
Total Costs		**€11,638**
Gross Margin		**€18,730**
Family Farm Income		**€12,543**
Market Return		**-€4,476**

Data Source: NFS 2009

BurrenBeef Socio-Economics

- Farm profile:
  - Farm sample = 13
  - Single suckling
  - Average farm size 144ha approx.
  - 75% rough grazing
  - Average livestock units = 52
  - Limestone grassland and heath, limestone pavement, turlough

Data Source: BLP 2007

Financial Viability

Variable	sub-totals	Totals	NFS
Livestock and crop output		€20,293	€62,370
Subsidies			
SFP	€17,587		€42,306
Agri-env	€9,775		€6,132
DAS	€4,352		€3,762
Total Subsidies		€31,714	€52,200
Total Gross Output		**€55,389**	**€119,667**
Direct costs		€10,908	€30,912
Overhead Costs		€22,444	€40,389
Total Costs		**€33,352**	**€71,301**
Gross Margin		**€44,481**	**€88,755**
Family Farm Income		**€22,037**	**€48,366**
Market Return		**-€13,059**	**-€8,931**

Data Source: BLP & NFS 2007

Social Issues

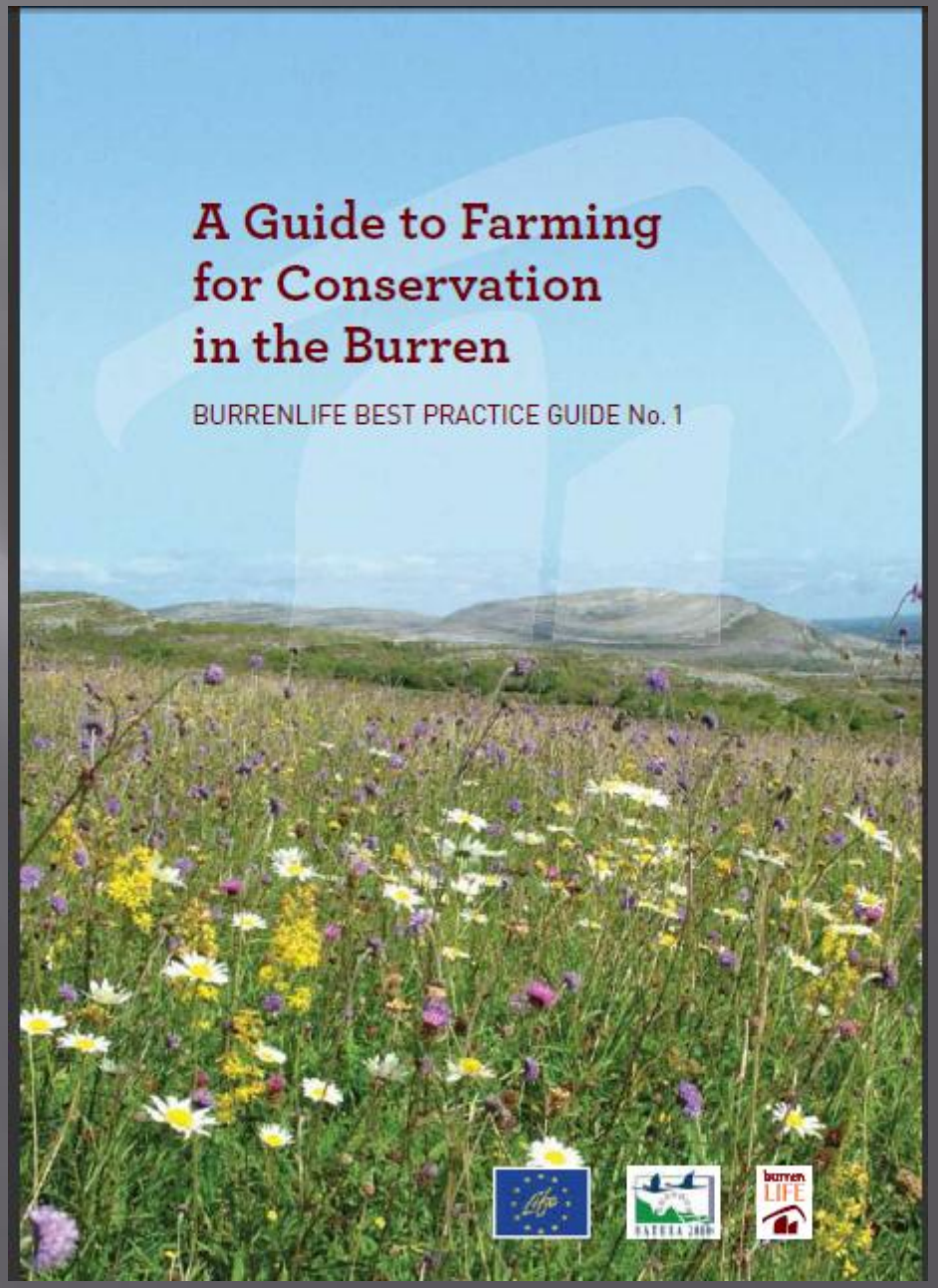
- Aging farming population
- Farming increasingly part time
- Less time for labour intensive farming practices
- Rural isolation
- Role of the farmer in society, a sense of pride and self worth

Economic versus Financial Viability

- Socio-economics of farming for conservation in the Burren (Van Rensburg et al 2009)
- Burren socially beneficial extensive farming practices financially non-viable
- Value positive externalities using choice experiments and prediction techniques
- Positive values of externalities ranging from €842-€4,420 per ha per annum
- Externalities = positive cultural, landscape and biodiversity externalities and multiplied (local) tourism revenue
- Rate of return to tax payer on current BFCP expenditure = 235% minimum

Burren Farming for Conservation Programme:

Developing a new model for the sustainable agricultural management of Burren
www.burrenlife.com



Article 68

- Art 68 Reg. 73/2009 "specific types of farming which are important for the protection or enhancement of the environment"
- Delivery of a targeted work programme for ecosystem services provision in Burren

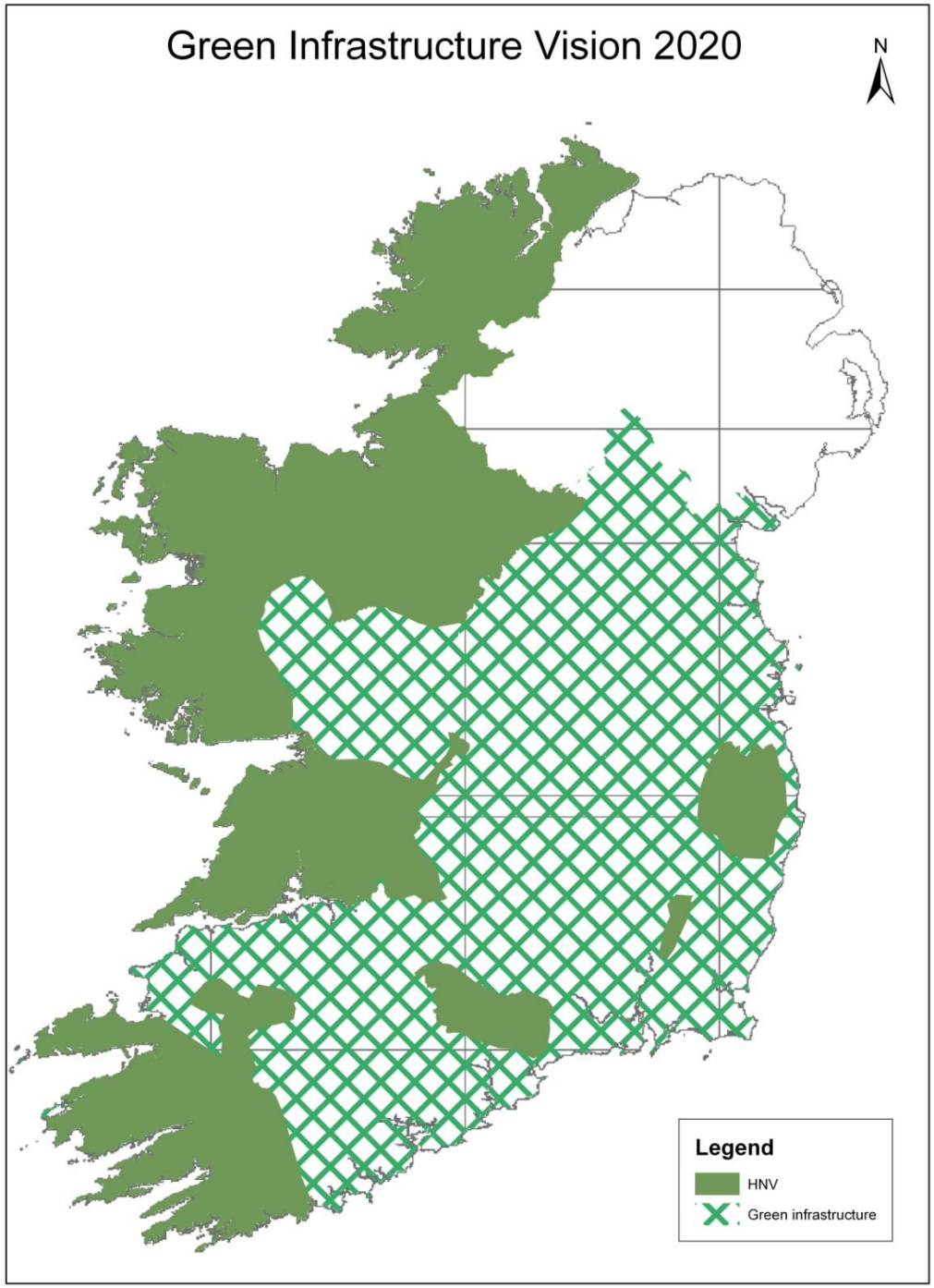






Article 68 and current CAP supports for HNV-DIFFICULTIES

- Costings - income foregone and costs incurred
- Scrub control and GAEC rules
- UAA no payments for scrub mosaics, limestone pavement (priority habitats maintained by extensive grazing)
- Payment for ecosystem service provision: Opportunity costs + transaction costs + incentive/reward payment.
- Principle "fair days pay for a fair days work"
- Necessity for a "twin track" approach to CAP to make the European Multifunctional Model of Agriculture Work


Green Infrastructure Vision 2020
N
Legend
HNV
Green infrastructure

Restoring a sense of pride.

HNV Farming-Products

- High Nature Value Farmland – Ecosystem Services
- Conservation grade beef, lamb, dairy products
- Eco-tourism, Education and Awareness Raising
- Vibrant Rural Economy

Key Points.

- 350 years of socio-economic and landscape change in HNV areas of Ireland
- Marrying science with traditional knowledge to develop sustainable management practices
- Economically viable in a new targeted CAP
- Realising and delivering a 2020 vision requires a twin track approach to CAP.

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