

Supporting HNV farmland conservation: Lessons learnt and future needs for science into policy and practice

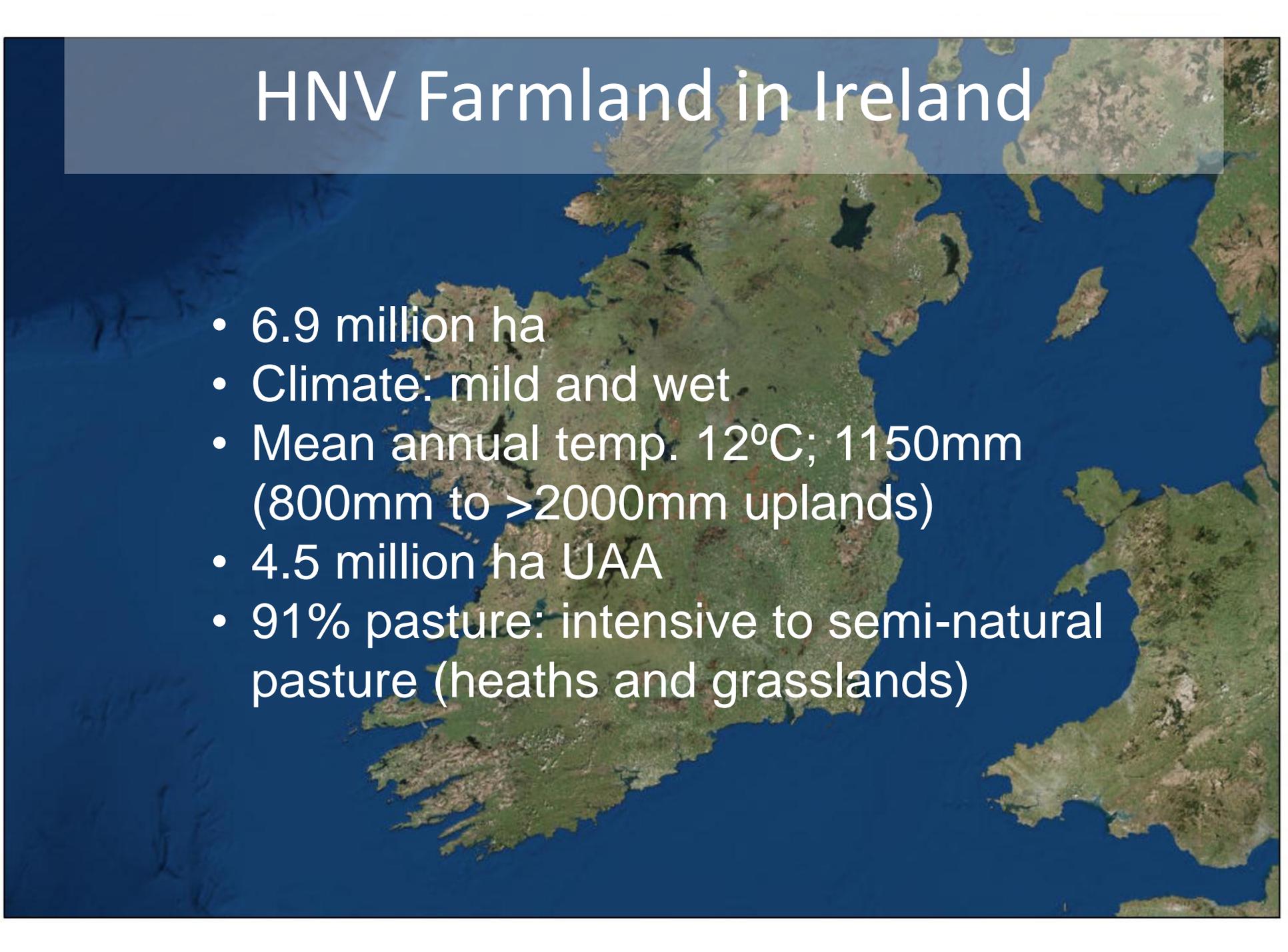
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Outline

- **HNV farmland in Ireland and its identification**
- **Socio-economic context-need for support**
- **HNVf initiatives in Ireland**
- **Lessons learnt-mapping a way forward**
- **The Future–Innovation, partnership, locally adapted and results orientated solutions**



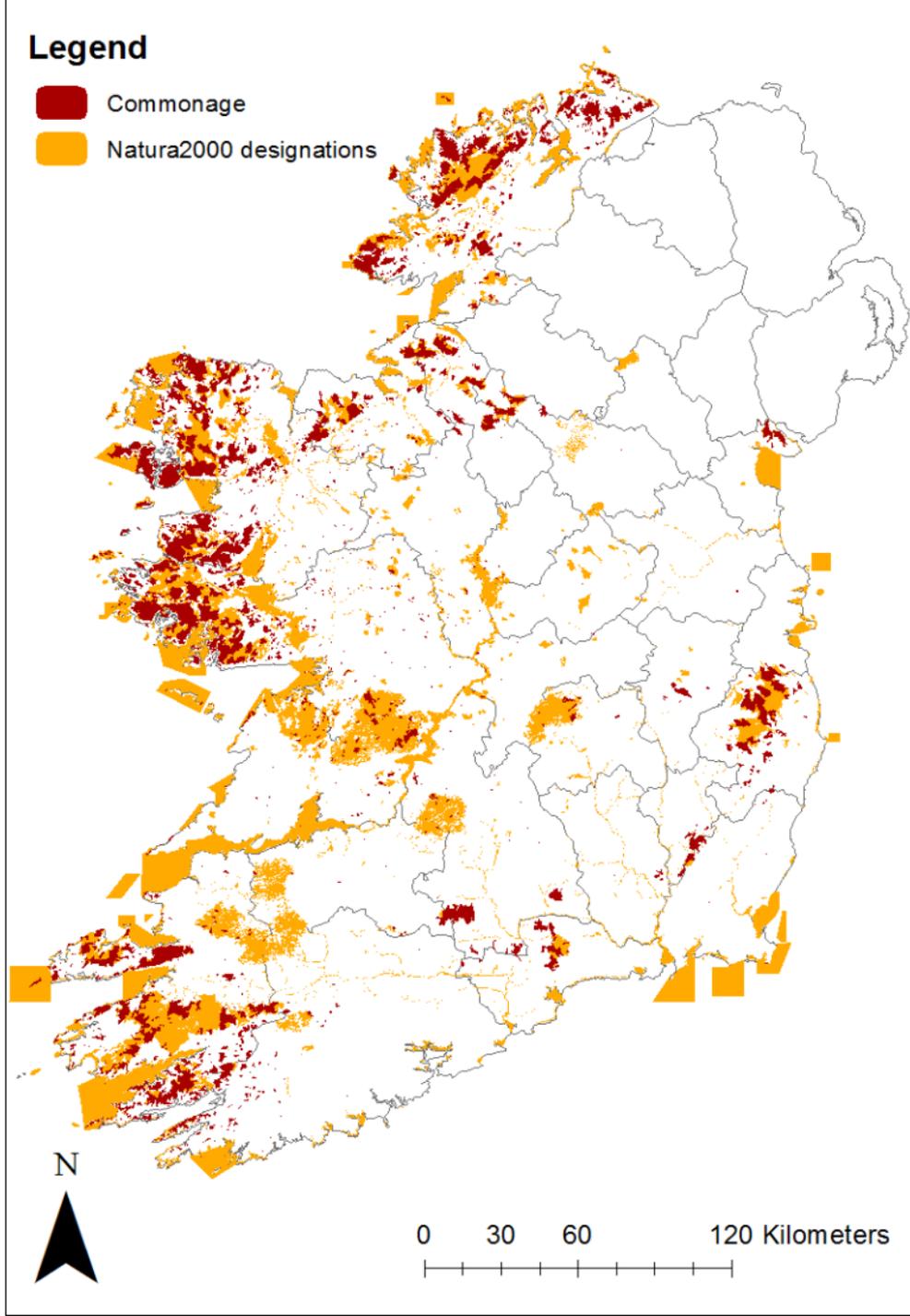
HNV Farmland in Ireland

A satellite-style map of Ireland and the surrounding regions of the British Isles, including Great Britain and parts of France. The map shows the green and brown terrain of the landmasses against the blue of the Atlantic Ocean. A semi-transparent dark blue box is overlaid on the top left of the map, containing the title and a list of statistics.

- 6.9 million ha
- Climate: mild and wet
- Mean annual temp. 12°C; 1150mm (800mm to >2000mm uplands)
- 4.5 million ha UAA
- 91% pasture: intensive to semi-natural pasture (heaths and grasslands)

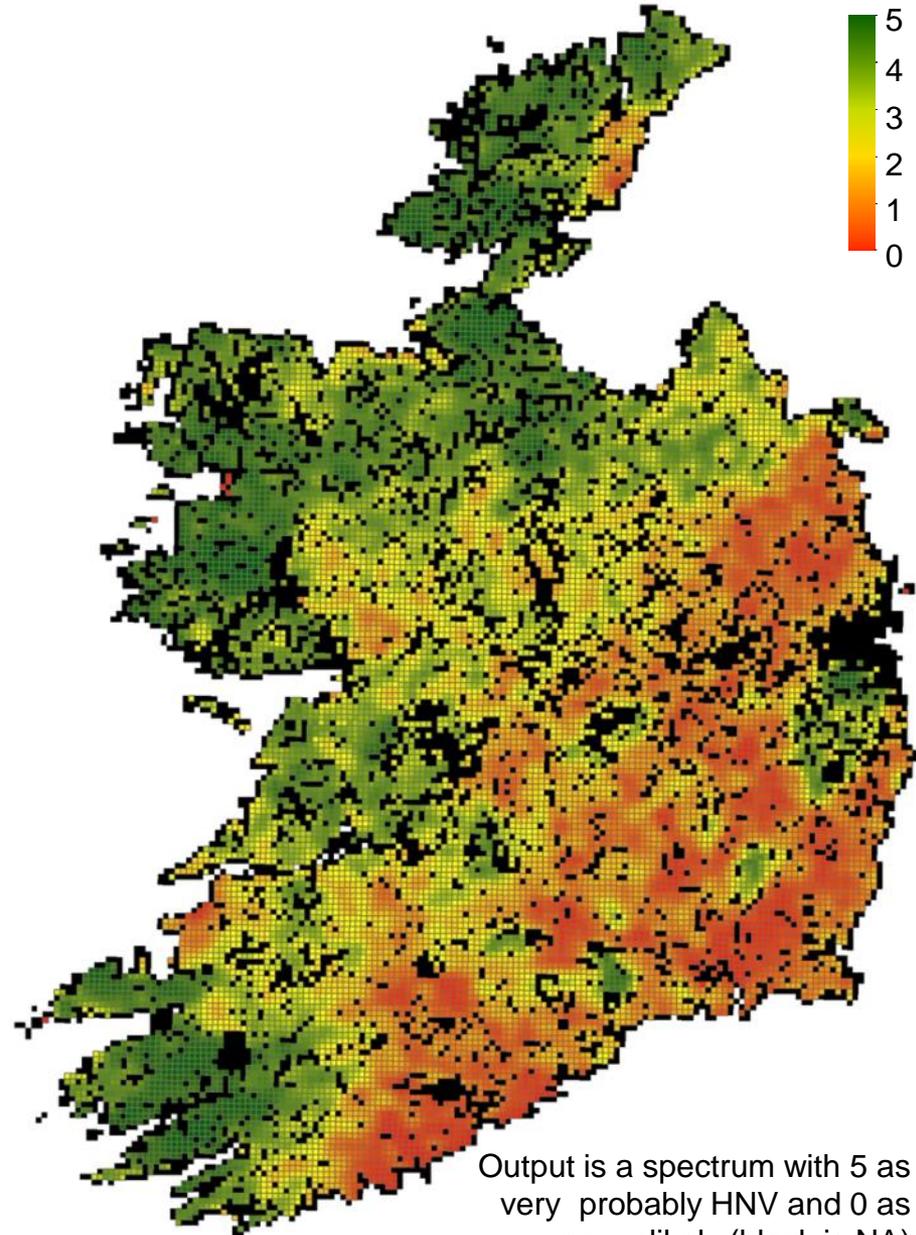
HNV Farmland in Ireland

- Natural constraints- soils, topography, climate and remoteness
- High biodiversity, landscape and socio-cultural values
- Legal nature designations (Natura 2000), common land



Extent and distribution of HNV in Ireland

- Map of potential HNV farmland
- High HNV potential areas (class 4 and 5)
- Approx. 25% of agricultural area



Output is a spectrum with 5 as very probably HNV and 0 as very unlikely (black is NA)

Extensive upland areas



Semi-natural vegetation extending to sea level in west



Drumlin-wet grasslands



Calcareous grasslands, heaths and limestone pavement



Machair-coastal grasslands

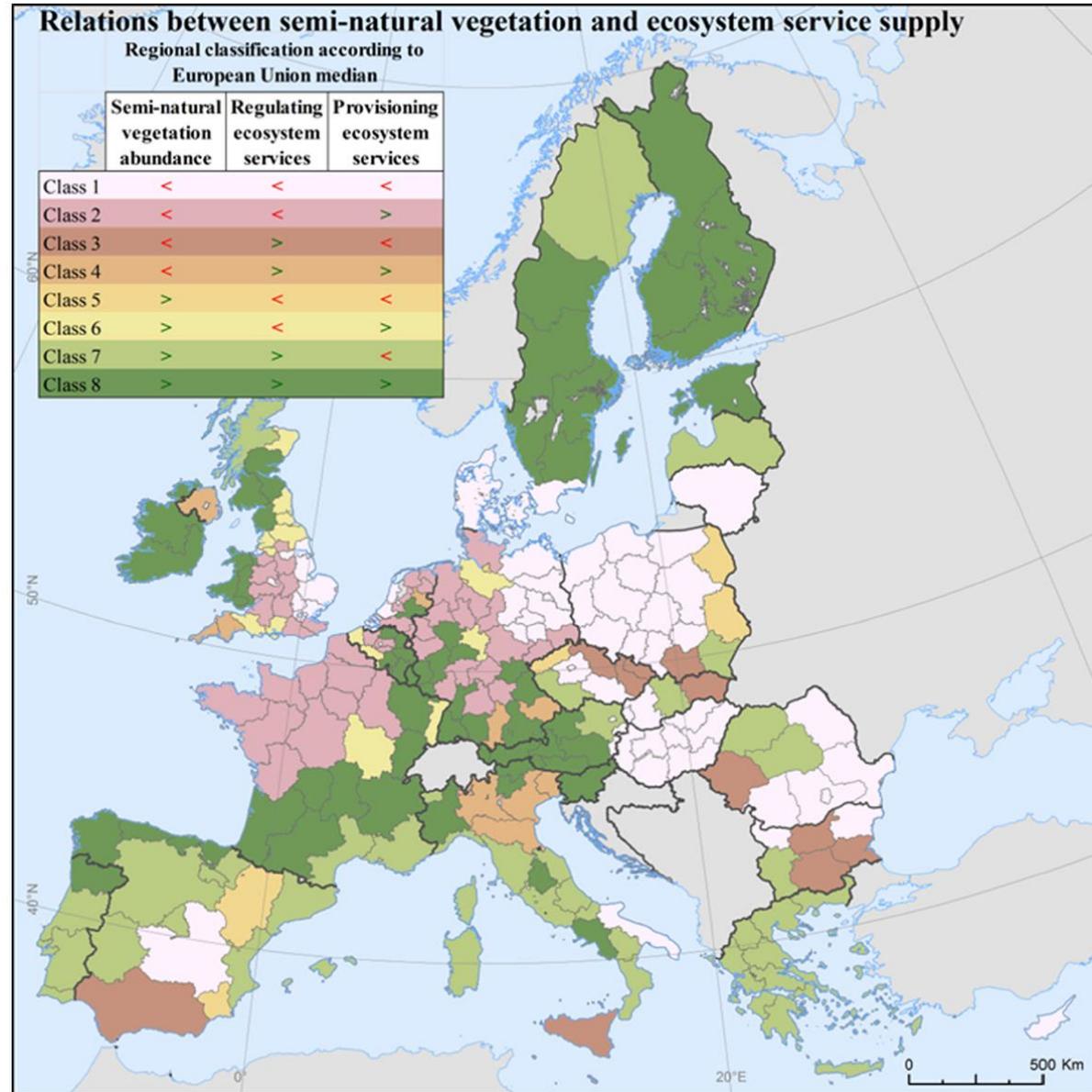


Cattle and sheep grazing



HNV farmland in Ireland – Need for Support

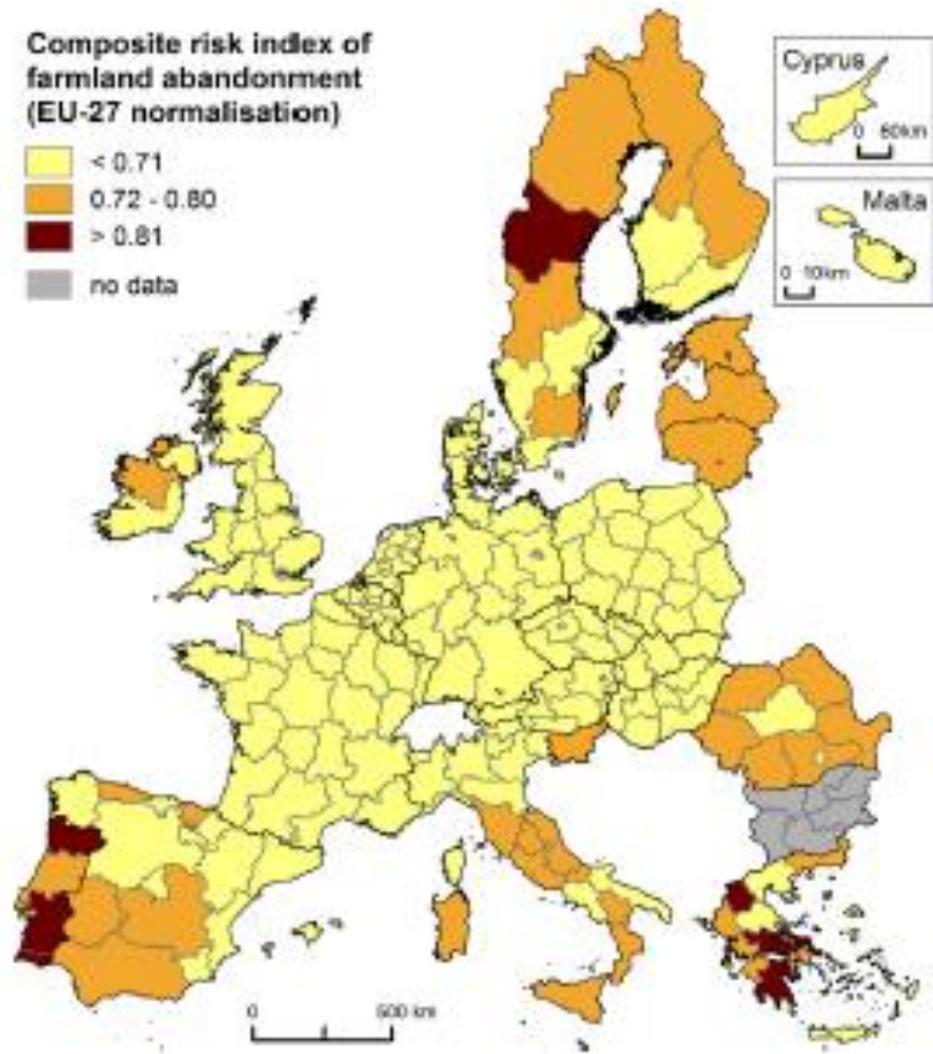
- Regional: a good balance in Ireland between provisioning and regulatory ecosystem service?
- Masks serious threats to HNV farmland and consequences for ecosystem service supply



Source: Garcia-Feced et al. 2014

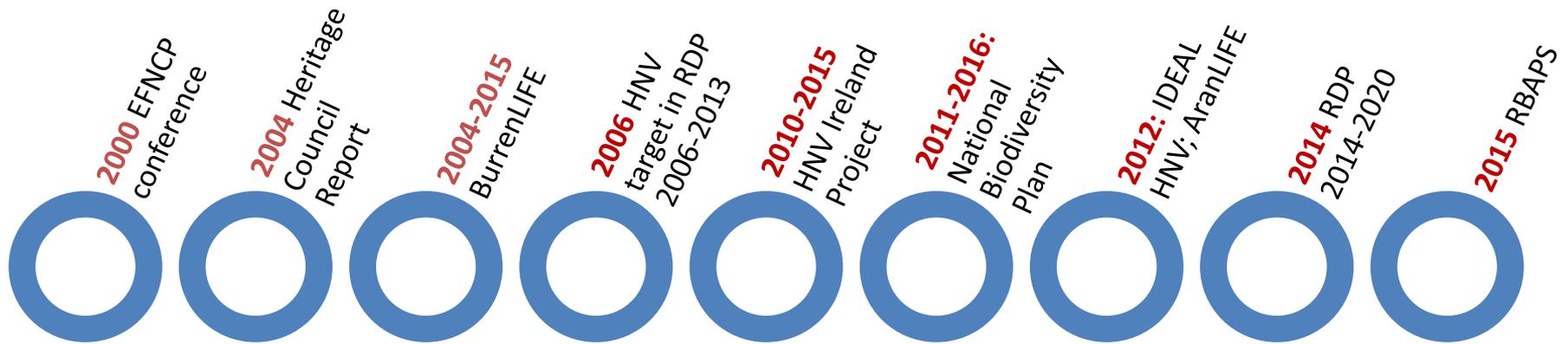
HNV farmland in Ireland – Need for Support

- Threats to HNV farmland include
 - Land abandonment and afforestation
 - Intensification
 - Polarisation (intensification and abandonment on the same farm)
- FADN: Market returns
 - Hill sheep (0.36 LU/ha) -€6,329 (Income €9,252)
 - Hill Cattle Rearing (0.66LU/ha) -€11,562 (Income €5,219)



Source: Terres et al. 2015

Timeline 2000-2015: HNV farmland concept and Ireland



Regional research projects (Burren, South west, East Galway, North west)

Best Practice and Demonstration Projects

- **BurrenLIFE 2004-2020**
- **AranLIFE 2013-2017**
- **RBAPS 2015-2018**



Ireland's Flagship HNV Programme: Burren LIFE 2004-2020 www.burrenlife.com



The Burren Life ('Burren Farming for Conservation') Programme divides its annual farmer payments roughly equally between payments for actions and payments for outputs. Here we look at the cumulative impact of 5 years of funding for farm-level actions – a total investment of c.€2.3m.



Actions

The actions supported by Burren Life vary from farm to farm and from year to year, allowing the farmer the flexibility to tailor these actions to the needs of his/her farm at that point in time...

[READ MORE](#)



Outputs

The Burren Life ('Burren Farming for Conservation') Programme divides its annual farmer payments roughly equally between payments for actions and payments for outputs...

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Socioeconomic

The Burren is best known for its bare limestone landscape, rare flowers and iconic archaeological sites. But many people forget that the Burren is a living landscape...

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Reaching Out

The concept of high nature value farming developed from a growing recognition that the conservation of biodiversity in Europe depends on the continuation of low-intensity...

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Evolution: Conflict to Sustainable Management of HNV

Agri-env.scheme and Designations as Natura 2000 (1995-2004)

Payment for restrictions

Little targeting in national scheme

Agriculture intensification and abandonment persists

Research-importance of farming to nature value



BurrenLIFE R&D Phase (2004-2009) EU LIFE Nature Funding

Partnership between agriculture and conservation (20 monitor farms)

Marrying science with traditional knowledge

A sustainable model for the agricultural management of Natura 2000



BurrenLIFE Phase 2 (2010-2014) Article 68 Pillar I CAP

Roll out of Hybrid Results Based AES (160 farms)

Targeted payments for ecosystem services (PES) scheme

Payment for results



BurrenLIFE Phase 3 (2015-2020) RDP Pillar II CAP

Expansion of Hybrid Results Based AES (500+ farms)

Improved payment structure for ecosystem services (PES) scheme

Payment for results



<http://ec.europa.eu/environment/life/>

Seeking to develop best conservation management practices of local farmers on designated Natura 2000 sites while harnessing local knowledge with scientific expertise of Project partners

The Project Team

The day-to-day operation of the project is being run by a project team, who are based in an office on Inis Oírr. They report to a project steering committee which operates under The Department of Arts, Heritage and the Gaeltacht who oversee, guide and support the work of the project team. The members of the project team are:

Louise Duignan - PhD Researcher
Dr. Patrick McGum – Project Manager
Dr Amanda Browne – Scientific/ Technical Officer
Gráinne Ní Chonghaile – Administration & Finance Officer



RBAPS 2014-2018

www.rbaps.eu

- Testing and developing results based AES
- €1.4 million budget
- 70% EU funded
- 30% from partners, & support from Heritage Council, DAFM & Teagasc
- 3.5 year project
 - 1st Jan 2015 to 30th June 2018
- 3 pilot areas:
 - County Leitrim, Ireland
 - Shannon Callows, Ireland
 - Navarra, Spain



Lessons Learnt from Demonstration/pilot projects



- **Participatory-partnership approach to design, development and implementation**
 - Local champions - Farmer led
 - Supported by NGOs and state agencies
- **Needs to be:**
 - Targeted to specific area (local and practical), Results based, flexible and adaptive management approach, tailored to individual farm
 - Well researched – knowledge based (science and tradition)
 - Integrated knowledge transfer/advisory service
- **Results based Hybrid approach – farmers paid for result and actions that support delivery of result (10 point scoring - ecosystem health check)**
- **Putting the “value” back in High Nature Value**

Awareness Raising, Policy and Advocacy Work (2010-2015)

- HNV Ireland Project 2010-2015 : Supporting HNV farmland in Ireland.
- Building on success of BurrenLIFE
- EFNCP, IT Sligo partnership (Heritage Council and EU LIFE NGO funded): Work with a wide range of partners (NGOs, farm organisations, state agencies and government departments)
- HNV Ireland officer

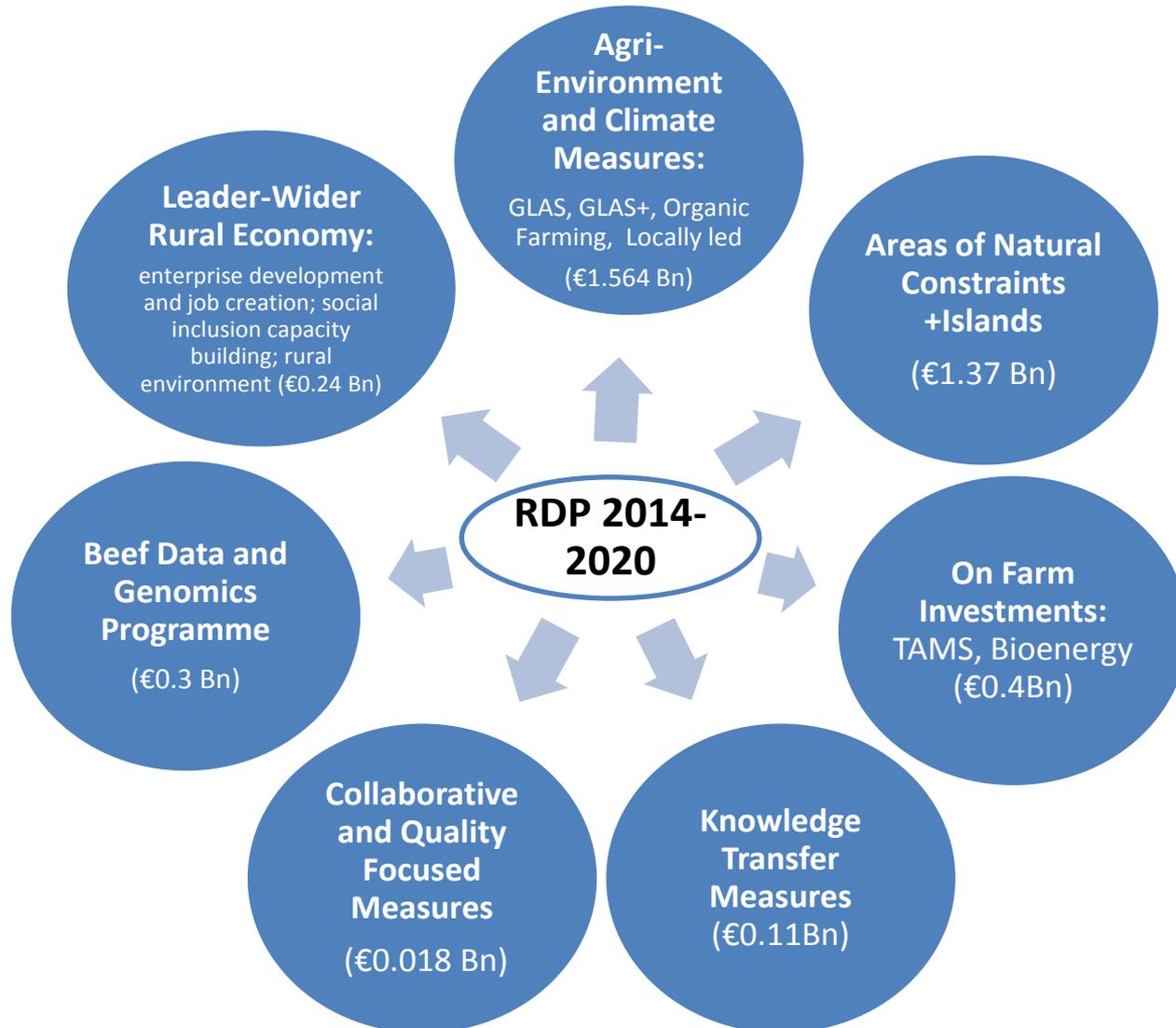


Focus Areas

- **Awareness raising** - Identify threats, opportunities and practical solutions for HNV farmland
- Building a **Network and capacity building (local partnerships working together)**
- **Improving understanding and knowledge building:** Series of case studies and demonstration projects
- **Policy and advocacy work:** Formal responses to call for submissions on RDP 2014-2020
- HNV farming in Ireland receives workable, appropriately funded support 2014-2020 CAP, complementary well-designed measures
- <http://www.efncp.org/projects/hnv-farmland-irish-uplands/>



RDP Measures (July 2014) €4 billion



Overall Structure of AES in RDP

**GLAS and
GLAS+**
(€1,450 Million)

Tier 1

Natura, Farmland Birds,
Commonages, High Status
Water, Rare breeds, Intensive
farms

Tier 2

Vulnerable water areas, Min. tillage,
low emission slurry, wild bird cover

Tier 3

General env. actions e.g. bird boxes, new hedgerows,
low input permanent pasture, hay meadows,
archaeological sites

Locally Led AES

**Burren, Hen Harrier,
Freshwater Pearl
Mussel, Call For
Proposals**
(€70 million)

Problems still exist

- Land eligibility vs. conservation objectives
- Resources not optimally targeted to secure maintenance and enhancement of high nature value farmland
- Semi natural vegetation outside commonage and Natura 2000 has no targeted actions
- Farms dominated by semi-natural pasture don't exist in Ireland outside Natura 2000 and Commonage areas?
- Risks of abandonment and intensification persist



Opportunities for HNV in RDP

- Locally Led AES- A significant opportunity to further test and pilot innovative measures
- BurrenLIFE (Phase 3 funded) and there will be a competitive call open in 2016
- Action being instigated by local groups/partnerships- need support (LEADER a possibility)
- Potential for High Nature Value Farming EIP to develop knowledge transfer framework



Lessons Learnt from policy and advocacy work

- Building local partnerships and wider HNV network essential (need HNV community of practice)
- Partnership approach works
 - Need to secure stakeholder involvement
 - Need dedicated community champions to take initiative and drive innovation
- Knowledge based of initiatives (research marrying science and traditional knowledge) -need dedicated research programme for HNV farmland (25% of UAA)
- Knowledge transfer: Advise, education and capacity building
 - Knowledge transfer initiatives needs to be mainstreamed into National Farm Advisory Service (FAS)
 - Need HNV farmland Innovation Partnership (based on European Innovation Partnership) funded under RDP
- Need for direct involvement in RDP - Government working group on HNV policy development, implementation and monitoring

Future Research Needs

- Multidisciplinary projects (ecologists, agricultural and environmental scientists, economists, social scientists etc.)
- Mapping and quantification of Ecosystem Services associated with HNV farmland
- Optimising farm management to deliver biodiversity and relationship with ecosystem services (synergies and trade offs)
- Design of agri-environment schemes – payment for ecosystem services
 - Quantifying ecosystem health/service supply as a basis for payment systems
 - Financing: Biodiversity trading/credit system, voluntary markets?
- Development of remote sensing techniques to monitor changes in quantity and quality of HNV farmland.
- What is HNV farmland role in wider land use spectrum -re wilding; organic farming; sustainable intensification; conventional agriculture; context of GHG targets and various Food and Forestry Strategies etc.

Next steps in Ireland

- Working towards CAP Reform 2020
- Ensure effective use of available resources and measures in RDP
- Community engagement - Locally Led AES (test bed for results orientated, innovative solutions)
- To support implementation and towards 2020 **NEED a knowledge and innovation network** (marrying tradition and science)
 - Focused on knowledge transfer, creation and development of innovative solutions
 - Occurring in a favourable policy and institutional framework



A pathway to a sustainable future



Innovation network, partnership, locally adapted and results orientated solutions