



# Agricultural biodiversity:

Current policies, programmes and practices

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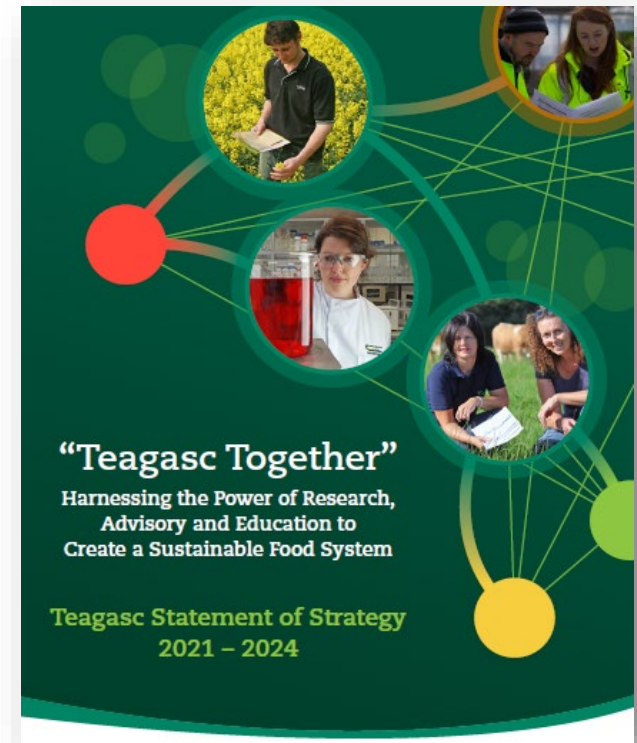


# Teagasc

## The Irish Agriculture and Food Development Authority

The national public body providing integrated research, advisory, education and training services to the Irish agri-food sector.

**Key objective:** “Provide science-based evidence and technologies to enable Ireland meet commitments in regard to gaseous emissions, water quality and biodiversity”.



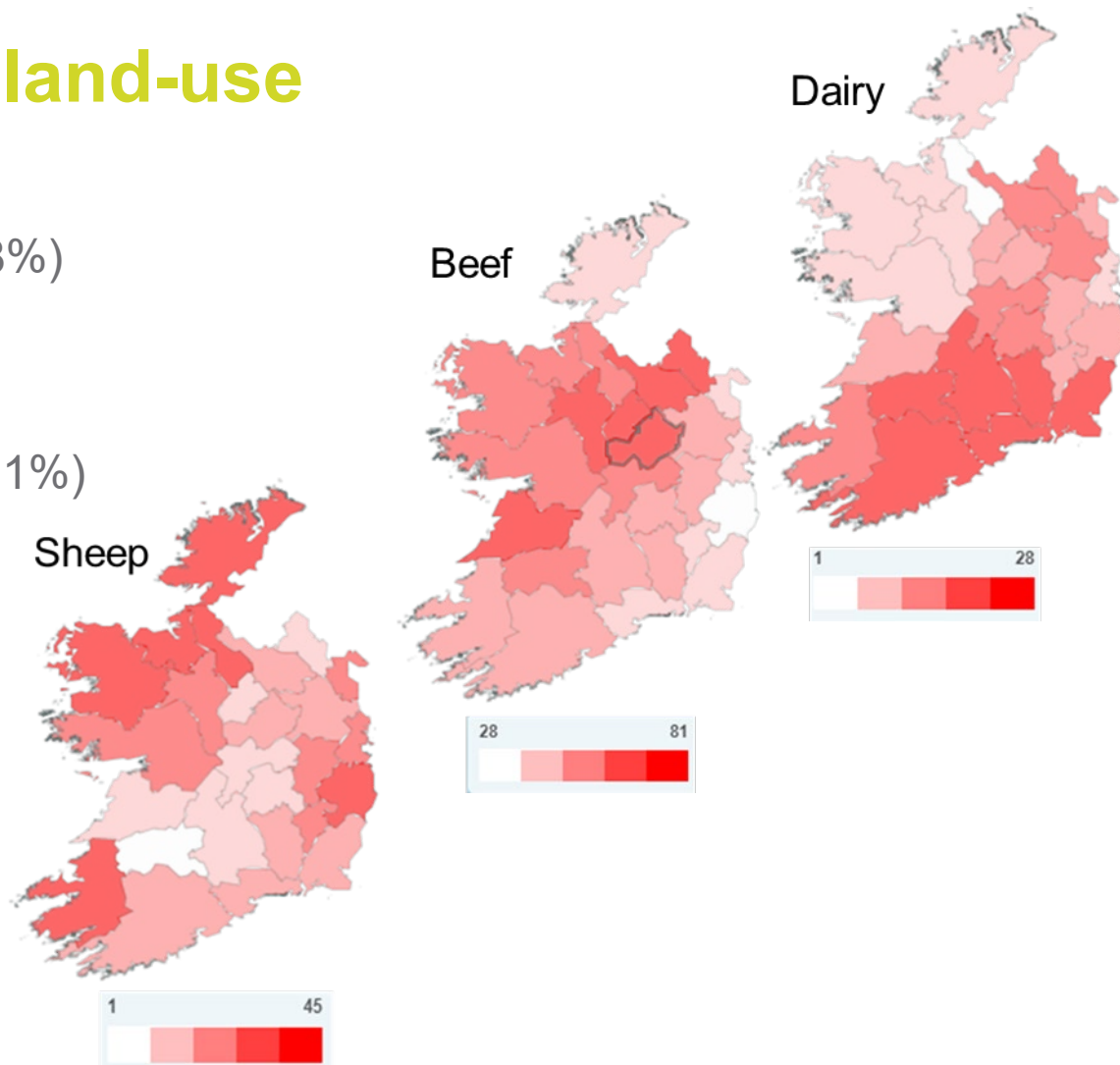
# Irish agriculture and land-use

## Land-Use

- Agricultural Land 4.5m ha (68%)
  - Grassland* 4.15m ha
  - Crops* 0.36m ha
- Forest 0.74m ha (11%)

## Livestock

- 7.3m Cattle
  - 1.6m *Dairy*
  - 5.7m *Beef/other*
- 5.5m Sheep



Significant variability in our farming systems

# Irish landscape

## Variability

- Soil type
- Geology
- Climate
- Habitat quantity, quality, diversity?

Lack of National Habitat Map

Right Measure: Right place?

## Ecosystem goods and services

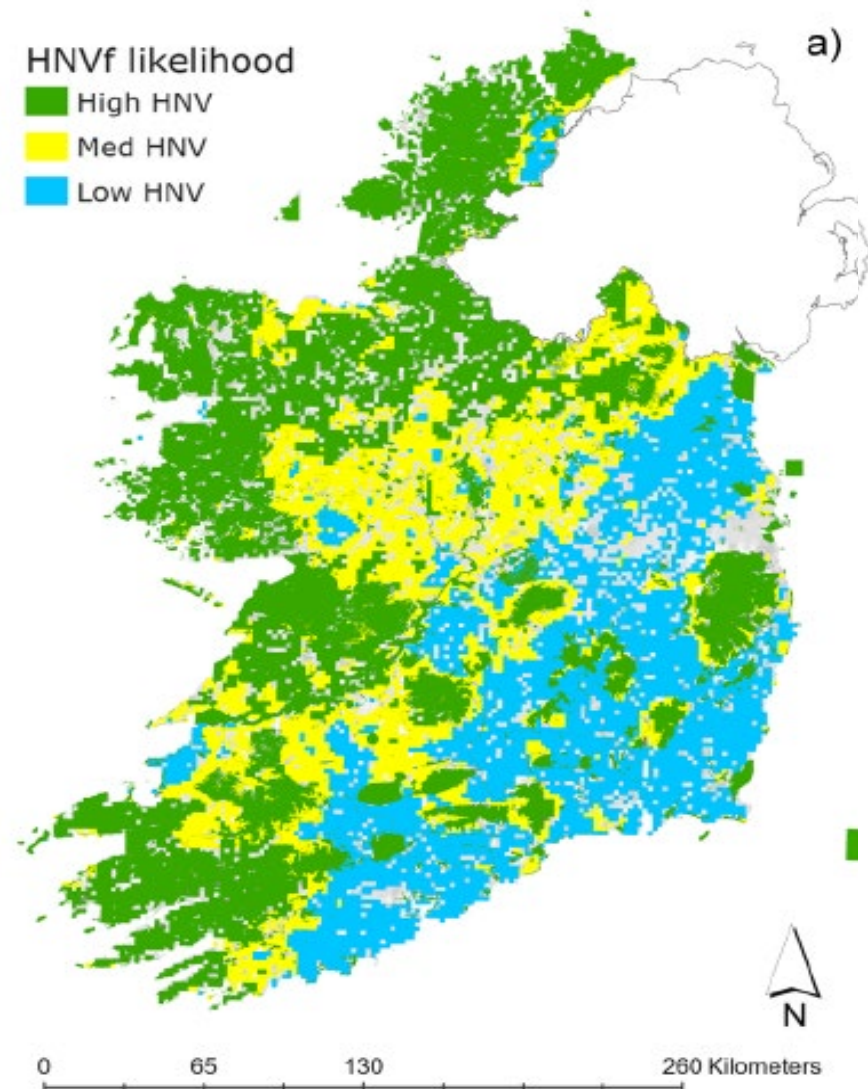
**Provisioning Services** Food and fuel

**Regulatory Services** Climate, water

**Cultural Services** Aesthetic, recreational

**Supporting Services** Soil, nutrient cycling

Significant variability in landscape and ability to deliver ecosystem services



# Demands on our land-base

**Balance** between economic, societal and environmental concerns.

**Sustainability challenge:** meet the needs of the present without compromising the ability of future generations to meet their own needs.



Different farm systems face different sustainability challenges.



# Policy infrastructure

Suite of policies and strategies

Complex policy environment

**Synergies:** Delivering multiple ecosystem services.

**Trade-offs:** one ecosystem service comes at the cost of another ecosystem service.

## Challenges:

Conflicting/competing policies

Changing policies

Short-term strategies

Policy ambition/ effectiveness

Data availability to inform policy



# Lessons learned from policy

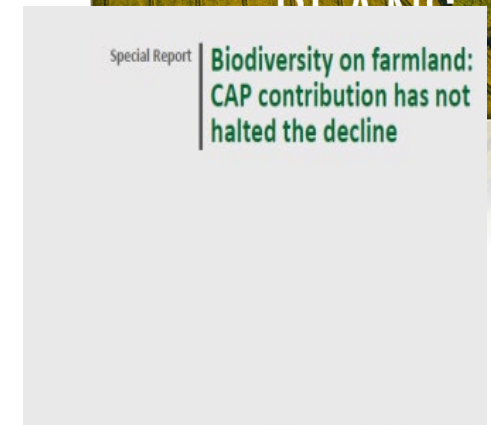
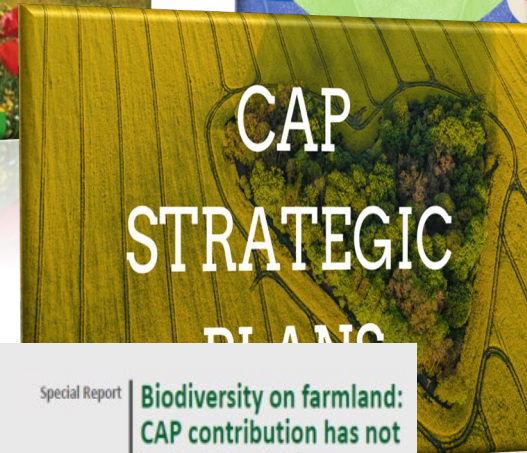
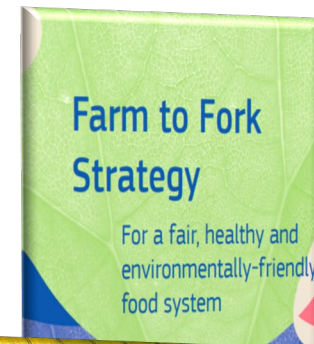
Integration of Biodiversity and Agricultural policies

## Common Agricultural Policy (2023-2027)

- (i) foster a smart, competitive, resilient and diversified agricultural sector ....;
- (ii) support and strengthen environmental protection, including biodiversity,....
- (iii) strengthen the socio-economic fabric of rural areas

*“Most CAP funding has little positive impact on biodiversity”*

Delivering on enhanced biodiversity ambitions within the forthcoming CAP



EUROPEAN  
COURT  
OF AUDITORS

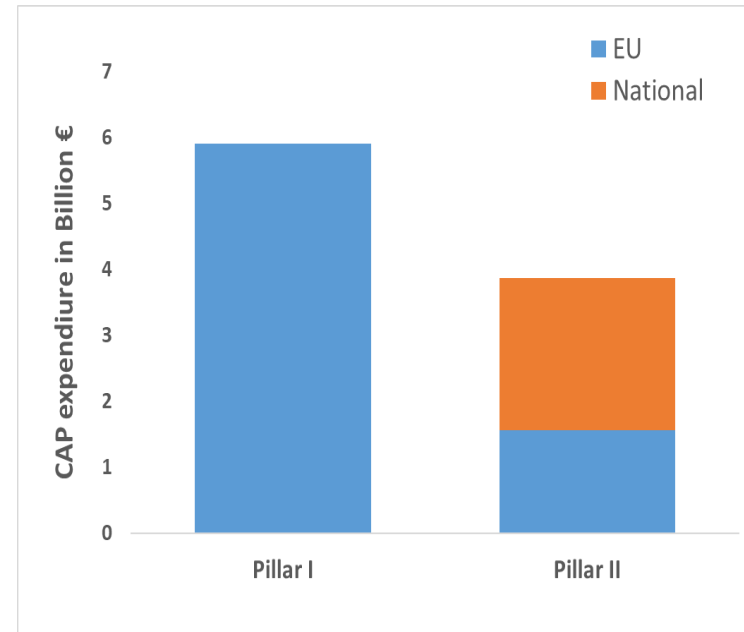
# Common Agricultural Policy

**Pillar 1** - Direct Payments & Sectoral Interventions

**Pillar 2** - Rural Development

Significant resources within the CAP

*75% of biodiversity expenditure is from agriculture*

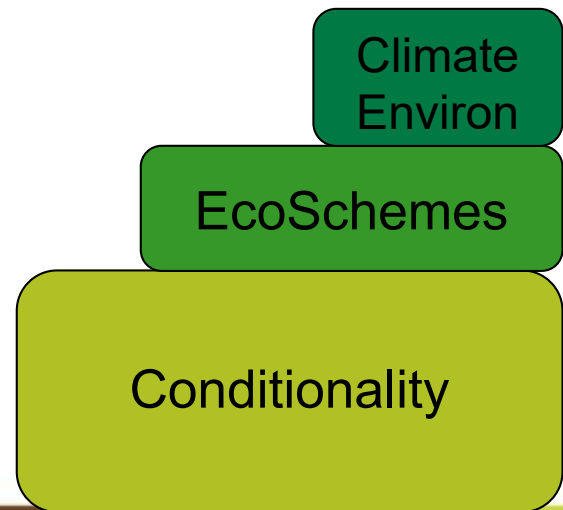


## Green Architecture of the CAP

Three core elements, across both pillars.

- Conditionality
- Eco-Schemes
- Climate/environmental interventions.

Opportunities to enhance habitat quantity and quality within CAP Green Architecture



# CAP – Green Architecture – Pillar I

## Conditionality

- Baseline requirements for farmers in receipt of CAP payments.
- Good Agricultural & Environmental Condition  
E.g. GAEC 8: Landscape features

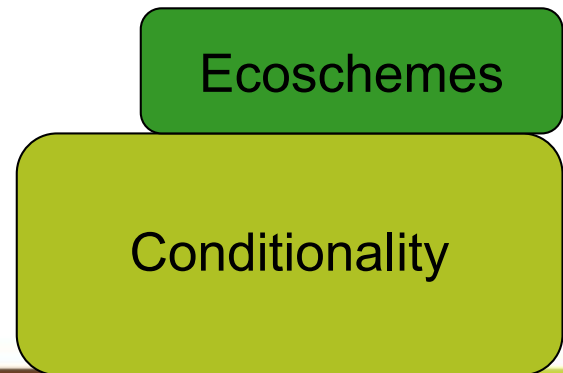
Minimum share “Space for Nature” – 4%

Average habitat area ranges from 6-7% on more-intensively managed farms to >30% on extensively managed farms (Teagasc, 2021)



## Eco-schemes Pillar 1 (25% Pillar 1)

- Build on conditionality.
  - Space For Nature (7%; 10%)
  - Planting of native trees and hedges
  - Additional environmental measures



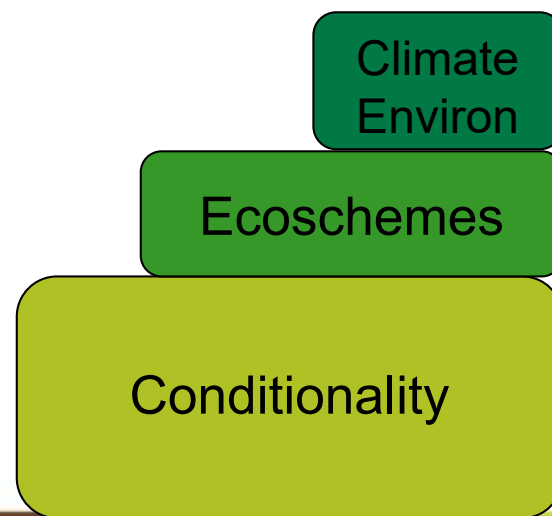
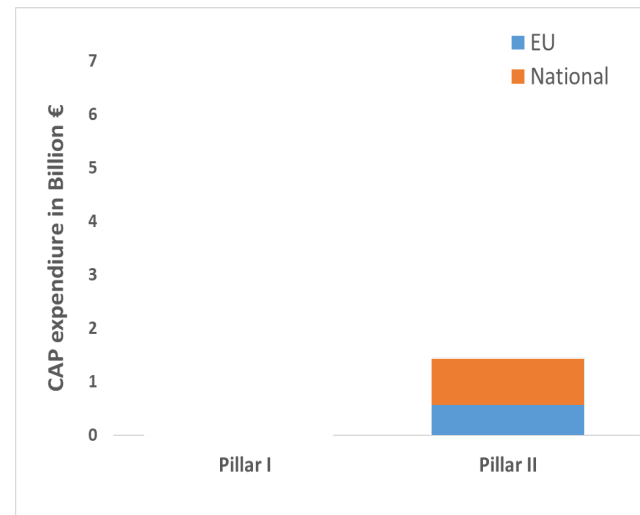
# CAP – Green Architecture – Pillar II

## Climate/ environmental interventions Pillar 2

- Agri-Climate Rural Environment Scheme (ACRES)

- ACRES General (€750m)
  - National (30k farmers)
  - Targeted and general actions
- ACRES Co-Operation Projects (€750m)
  - High priority areas (20k farmers)
  - Bespoke farm and landscape actions
  - Results-based payments

Locally-led, results-based approaches are vital for species and habitats of concern



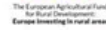
# Policy to Practice



# Hen Harrier EIP

## National

### Terrestrial, avian



**DANÚ Farming Group**

### Enable Conservation Tillage (ECT)

## Futures

1

## Generators



vi Data



Reeks



Infographic designed and produced by  
Dr. Shweta Chaturvedi (MBA/MSc Global)

eip-agri

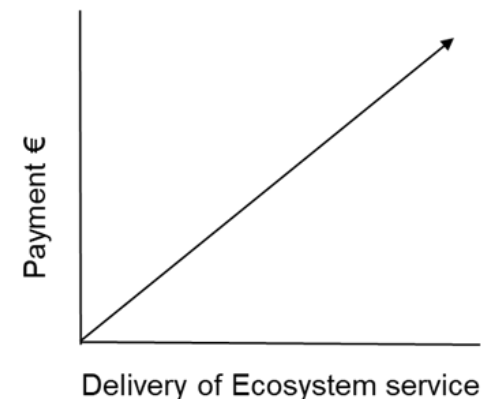
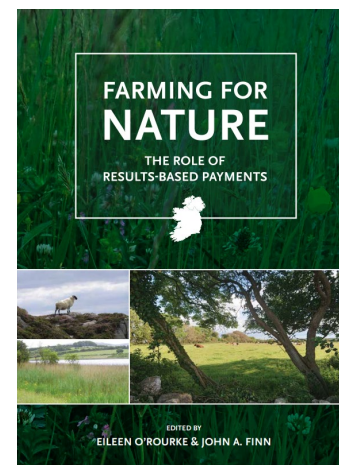


indication of 'Geographical Location' for each group can be found in the EIP-AGRI Project Storyboard Database on the National Rural Network website, and also on the EIP-AGRI Service Point website.

# Lessons learned from EIPs

- Farmers can address biodiversity issues, supported by advisors and all stakeholders. Early engagement + local champions crucial
- Local specificity of objectives and targets + Locally relevant prior knowledge
- Appropriate indicators
- Tailored payment structures
- Action-based + non-productive investment + result-based = Hybrid approach
- Specialised farm advice: Advisors, farmers and family are key influencers (Keena, 2020)

Opportunity to learn and scale up from short-term, geographically-limited projects.



# Teagasc Knowledge Transfer to farmers

- Biodiversity farming practices can be effectively changed through agricultural advisors.
- 97% of farmers use an agricultural advisor. Network of over 800 (DAFM approved) agricultural advisors, with potential to change practice on biodiversity.
- Discussion groups are an effective method of Knowledge Transfer...integrate biodiversity messages with environmental and production messages.
  - Comeragh Uplands Communities EIP
- Multiple knowledge transfer methods:
  - Media – national, regional, farming
  - National events – Open Days
  - Webinars – Signpost Series
  - Hedgerow week – improve habitat quality
  - Demonstration - Signpost Programme

Effective Knowledge Transfer plays a key role in supporting biodiversity objectives



# Summary

1. **Agriculture** is the dominant land-use. CAP is the dominant budget for Agriculture and Environment.

Nature conservation is dependent on farm-scale efforts, which will be guided by effective policy and implementation.

Timely, evidence-based, **monitoring** of policy effectiveness is imperative.

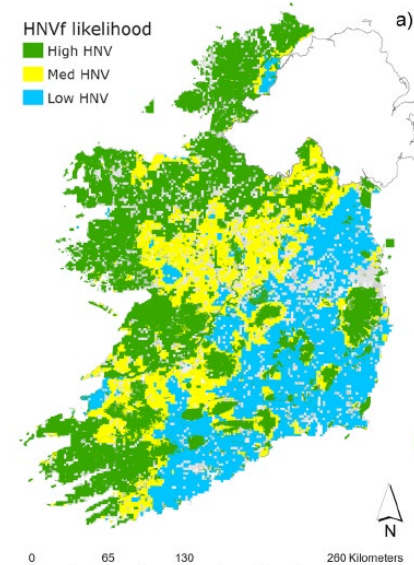
2. **Farms differ**, landscapes differ, biodiversity challenges differ. Responses will differ. Advice differs. One size does not fit all.

**Data** to address blind-spot in the countryside. Knowledge of biodiversity, functioning and delivery of ecosystem services. Right measure, right place.

Multiple methods of **Knowledge Transfer**.

3. **Complex policy environment**. Hard to have a clarity of purpose for biodiversity objectives.

**Policy coherence**, multiple stakeholders, lessons learned, valuing ecosystem services.



# Go raibh maith agaibh

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Research

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## Farmland Habitats

Irish farmland has a good diversity of habitats such as hedgerows, field margins, ponds and streams, native woodland, bogs and species-rich meadows and pastures. Irish biodiversity depends on farmland habitats.



## Research

Biodiversity and Countryside research is focussed on developing the scientific knowledge base required to underpin policy and farming activity that will contribute to conservation of farmland biodiversity and ecological resources



## Hedgerows

Hedgerows give the Irish landscape its distinctive character and field pattern. They provide an important wildlife habitat especially for woodland flora and fauna.



## Bees



## Built Heritage

# Teagasc National Biodiversity KT Programme

## Examples



- Support of Best Practice on farms through Agri Environment Schemes - high input from advisory services with resultant benefits
- Signpost weekly webinar with average of 350 viewers – regular biodiversity focus
- Farming Media (weekly): Growing Wild – promoting our native Irish biodiversity
- Best Practice biodiversity management at national events
- Hedge cutting contractors training
- National Hedgerow Week
- Integrating biodiversity into the Teagasc Signpost Programme