



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

# The Challenge

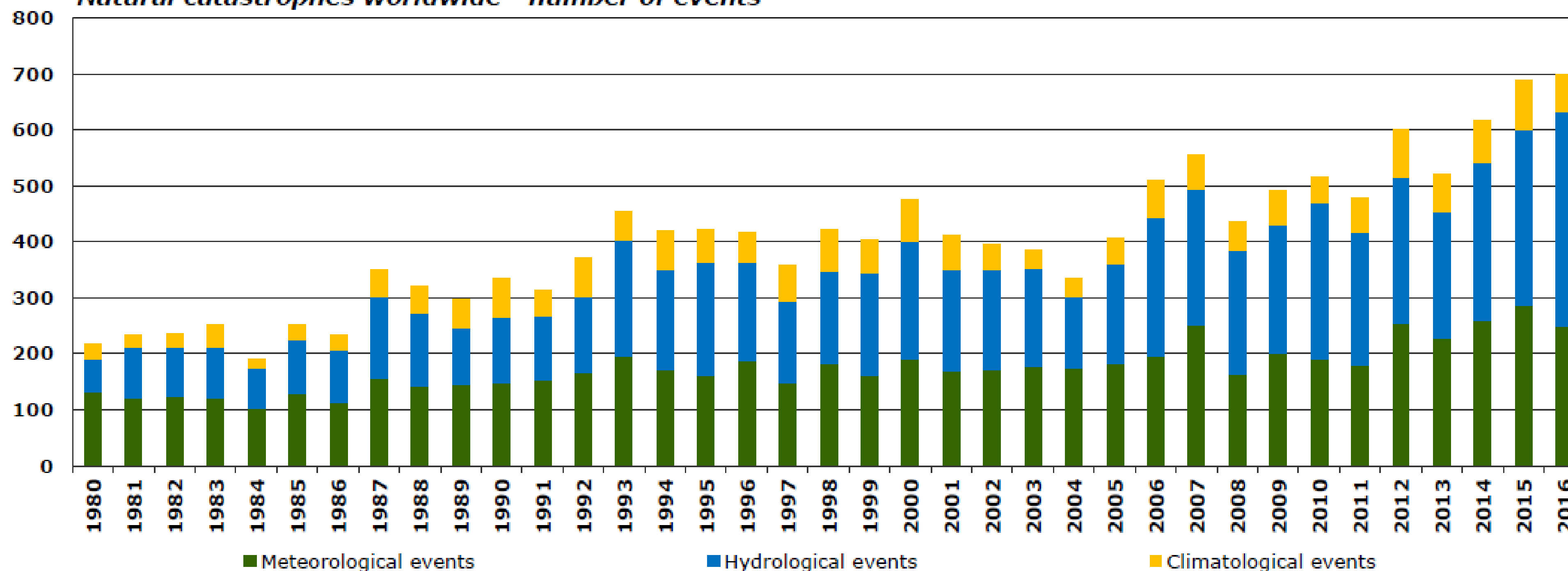
Jack Nolan



# WORLDWIDE EXTREME WEATHER EVENTS

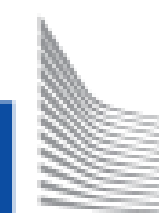


*Natural catastrophes worldwide - number of events*



Meteorological events: Tropical storm, extra-tropical storm, convective storm, local storm  
Hydrological events: Flood, mass movement  
Climatological events: Extreme temperature, drought, forest fire

Source: © 2017 Münchener Rückversicherungs-Gesellschaft,  
Geo Risks Research, NatCatService (January 2017)

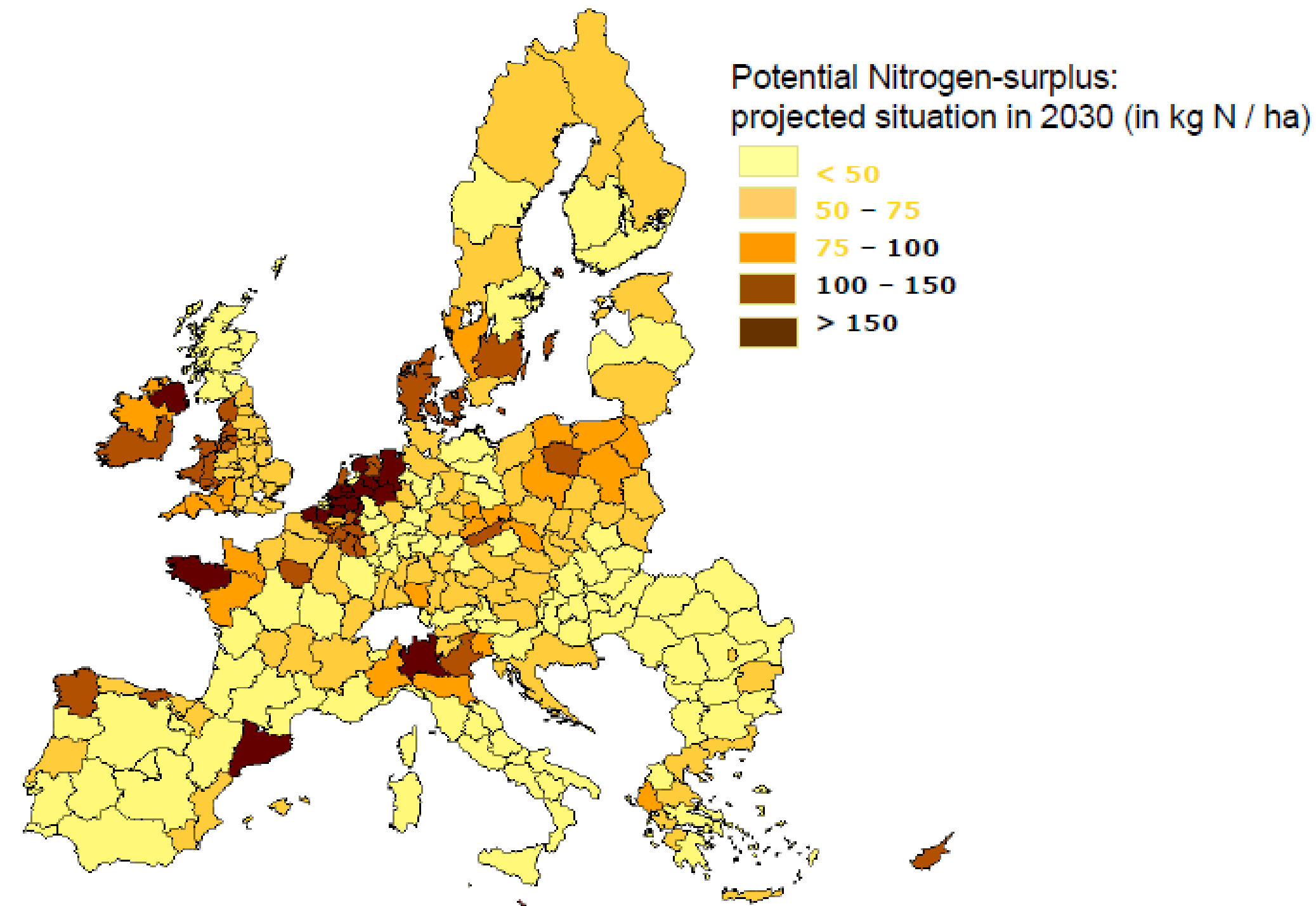




# CHALLENGES



Projected pressure on the environment due to potential nitrogen surplus in 2030: different impact across the EU



Source: JRC based on the CAPRI model baseline as presented in the DG AGRI 2017 outlook report.

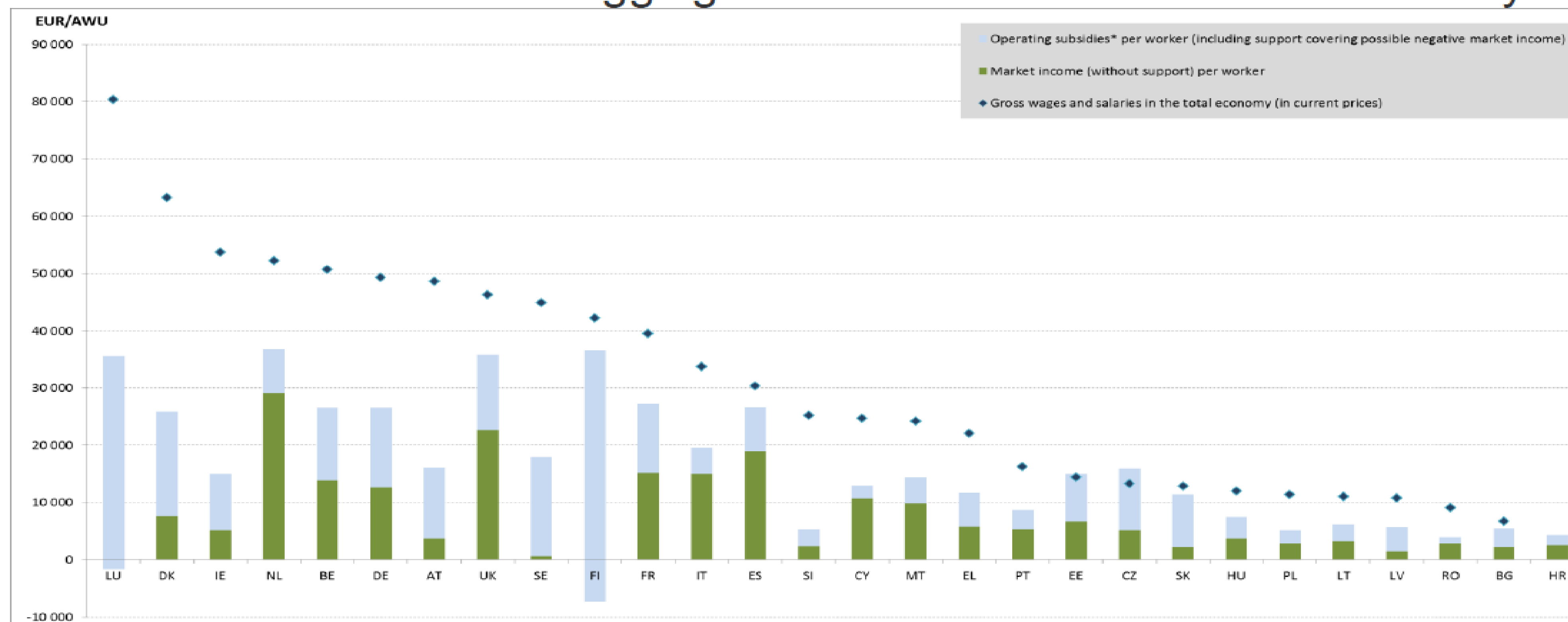




# CHALLENGES



## Farmers' income is still lagging behind salaries in the whole economy



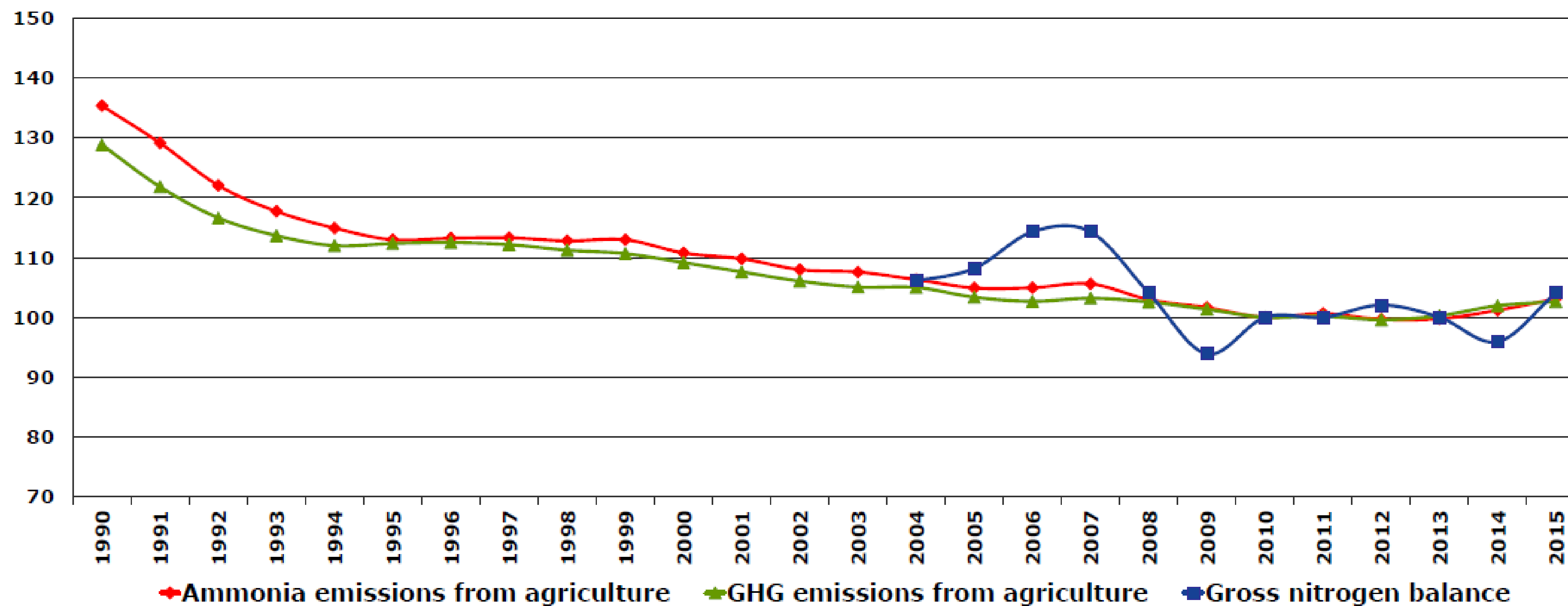
NB: Income indicator=Entrepreneurial income plus compensation of employees by total annual work units.  
Source: EAA, ESTAT 2013-2015, EU FADN for number of hours worked



# THE NEED TO DO MORE ON CLIMATE AND ENVIRONMENT



*Reduction in environmental impact indicators (2010=100)*



Source: Eurostat.



# State of the Environment



SYSTEMIC MESSAGES	 <b>Environment and Health &amp; Wellbeing</b>	 <b>Climate Change</b>	 <b>Implementation of Legislation</b>
	Recognition of the benefits of a good quality environment to health and wellbeing.	Accelerate mitigation actions to reduce greenhouse gas emissions and implement adaptation measures to increase our resilience in dealing with adverse climate impacts.	Improve the tracking of plans and policies and the implementation and enforcement of environmental legislation to protect the environment.
	 <b>Restore &amp; Protect Water Quality</b>	 <b>Sustainable Economic Activities</b>	
	Implement measures that achieve ongoing improvements in the environmental status of water bodies from source to the sea.	Integrate resource efficiency and environmental sustainability ideas and performance accounting across all economic sectors.	
	 <b>Nature &amp; Wild Places</b>	 <b>Community Engagement</b>	
TOPIC MESSAGES	Protect pristine and wild places that act as biodiversity hubs, contribute to health and wellbeing and provide sustainable tourism opportunities.	Inform, engage and support communities in the protection and improvement of the environment.	



# Structure of Farming in Ireland 2016



**Total Number of Farms** **137,500**

Average Farm Size  
**32.4 hectares**



**Livestock Numbers**

Poultry  
**11.1m**



Pigs  
**1.6m**



Sheep  
**5.1m**



Cattle  
**7.2m**



**Total Agricultural Area**  
**4,455,800 hectares**

Land Usage:



Grassland  
4,104,300  
hectares



Other  
62,100  
hectares



Cereals  
280,400  
hectares



Potatoes  
9,000  
hectares

**Farm Labour**

Total Number of Family Farms **137,100**

Male Holder  
**121,100**  
**88%**

Female Holder  
**16,000**  
**12%**



Age of Farmholder

Under 35  
**7,400**  
**5%**

65 and over  
**41,200**  
**30%**



# Food Wise 2025



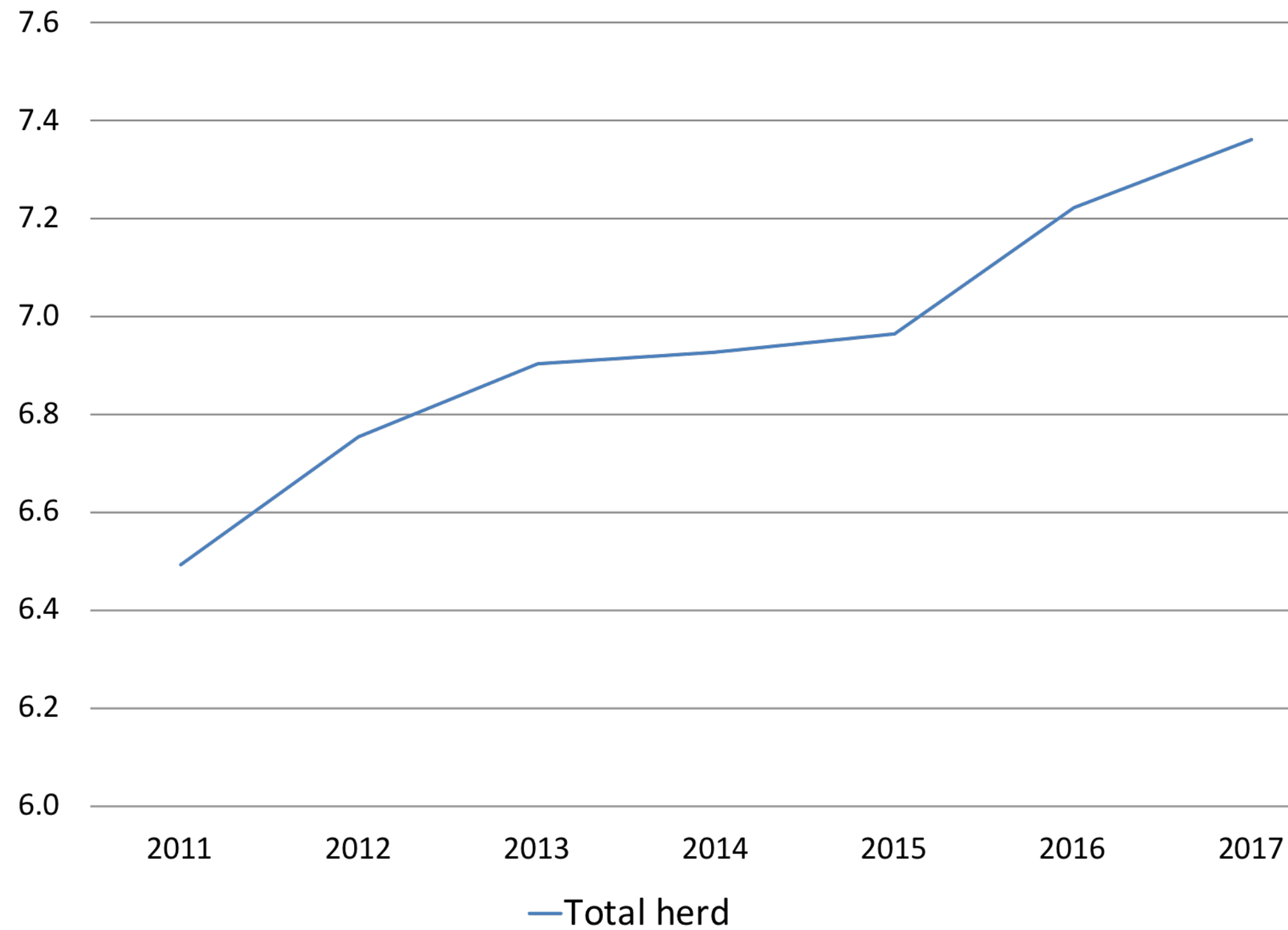
- **Strategic plan for development of agri-food sector**
  - 85% increase in exports to €19bn
  - 65% increase in primary production value to €10bn
  - Creation of 23,000 additional jobs along the supply chain
- **427 enabling actions**
- 78 related to sustainability



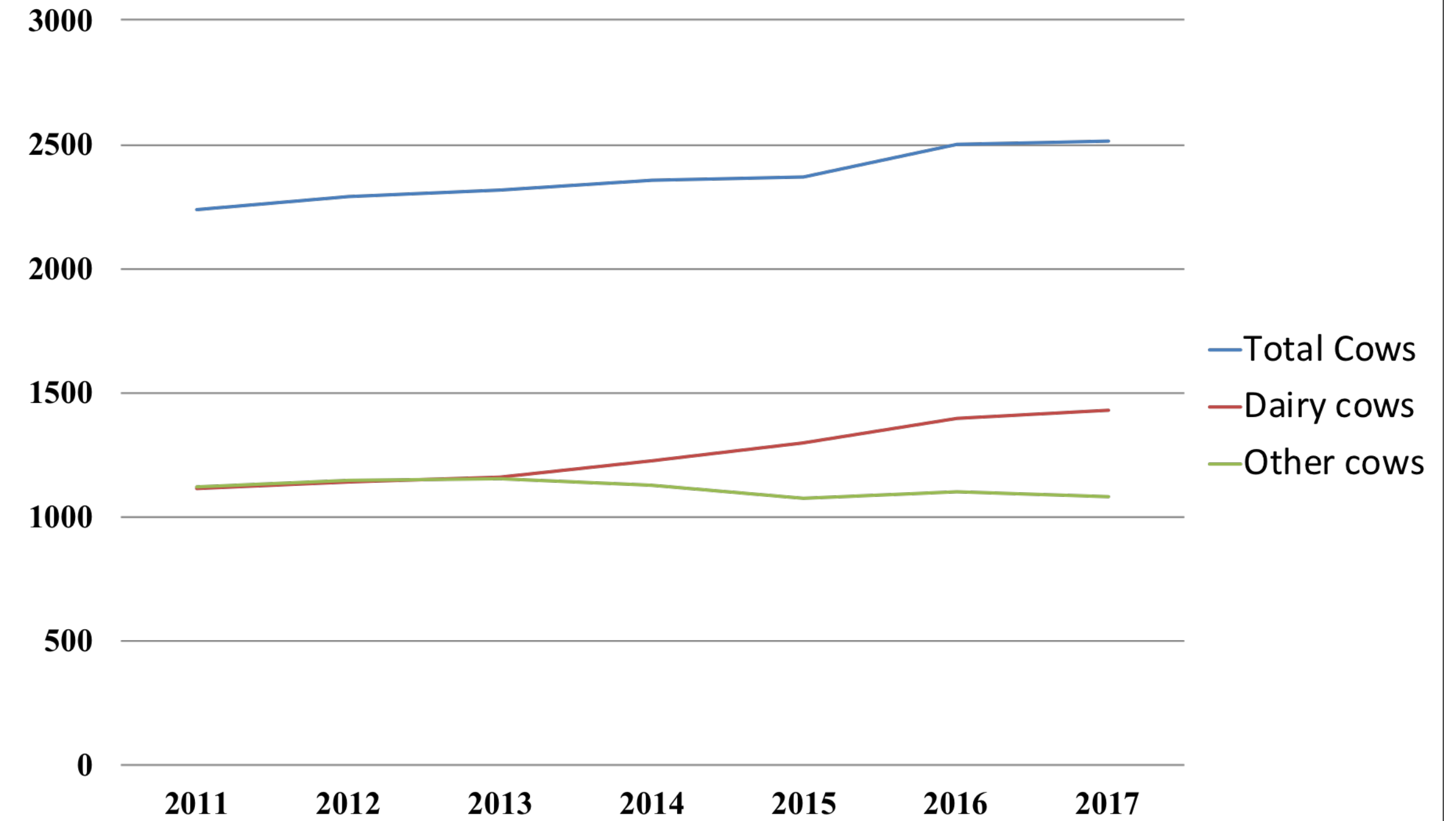


# Livestock Numbers

## Total herd (m's)



## Cow Numbers in June ('000 Head)

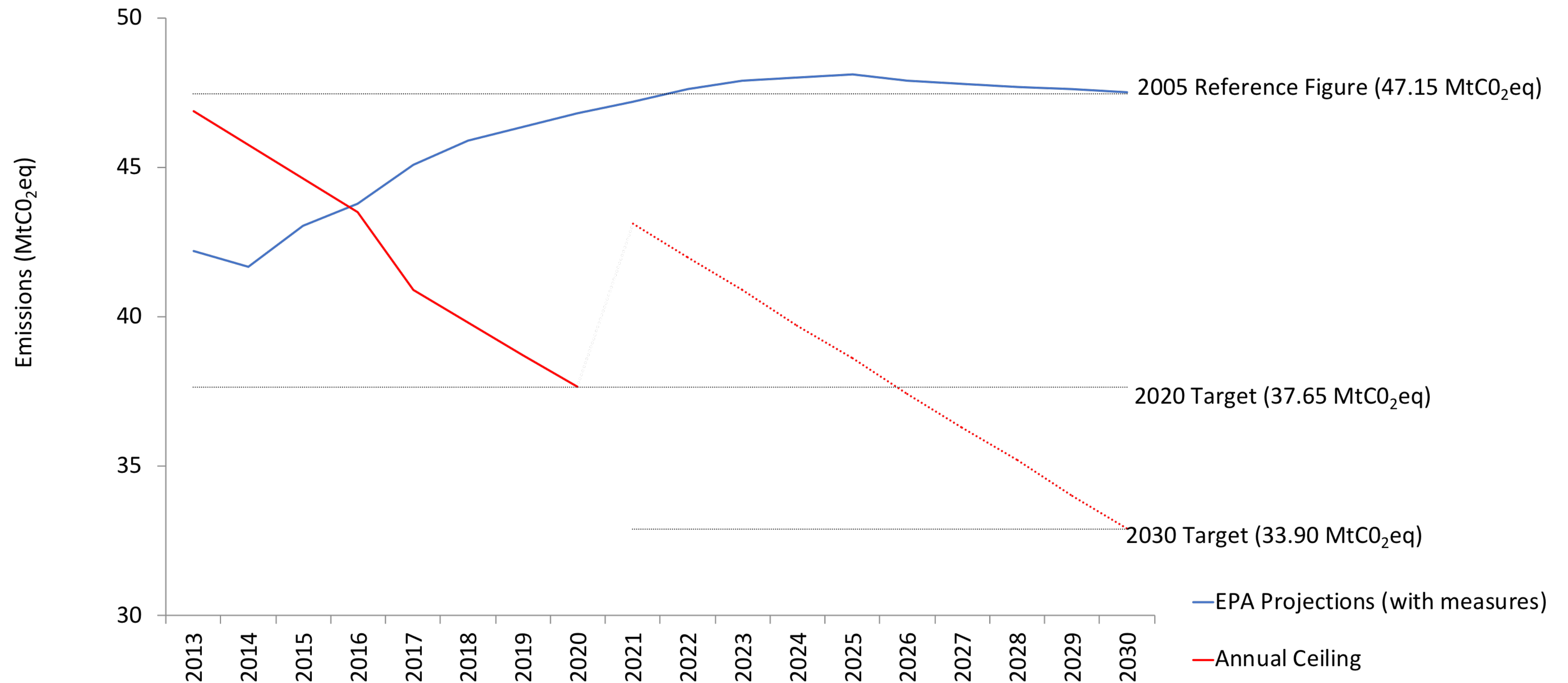


2.51m cows (1.43m dairy and 1.08 suckler)

# Greenhouse gases (GHGs)



- Irish agriculture comprises 45% of non-ETS GHG with a low C footprint
- 8<sup>th</sup> in absolute emissions across the EU (ag.)
- GHG and ammonia emissions projected to increase by 2030 due to increased dairy cows and fertiliser use





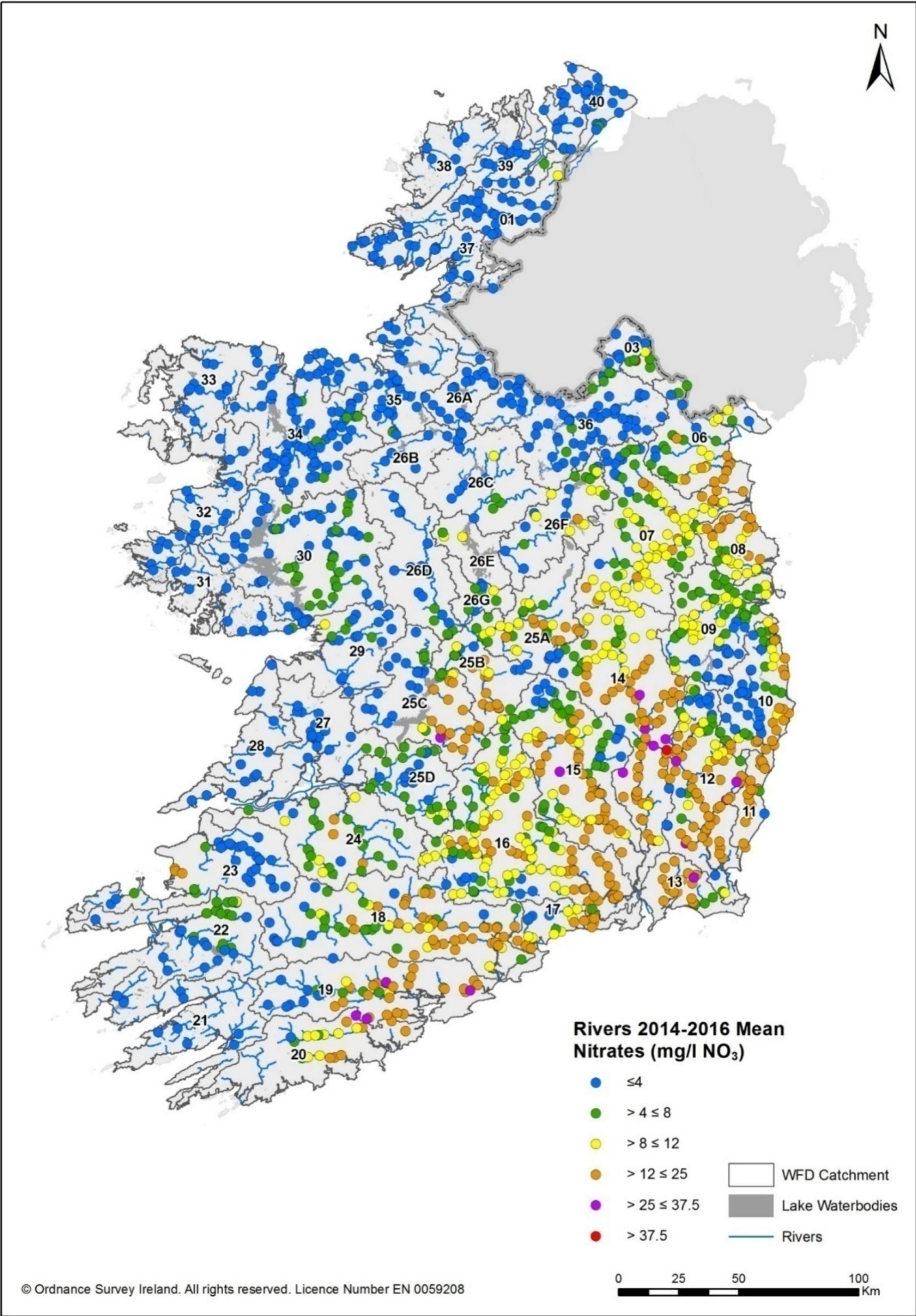
# Nitrates and the WFD: Irish Context

## River Basin Management Planning



*Restore & Protect Water Quality*

Implement measures that achieve ongoing improvements in the environmental status of water bodies from source to the sea.





# National Biodiversity Action Plan | 2017-2021

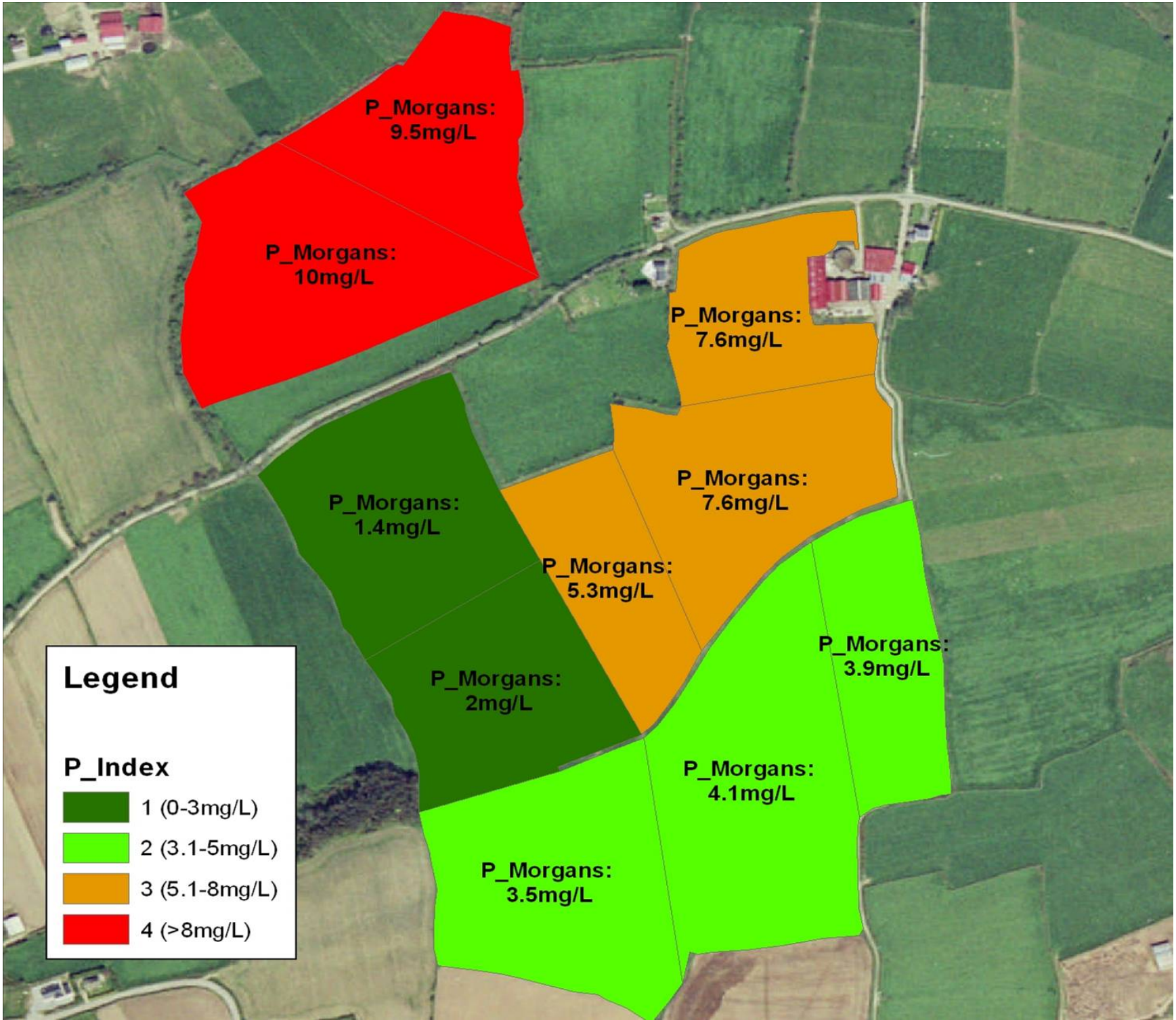
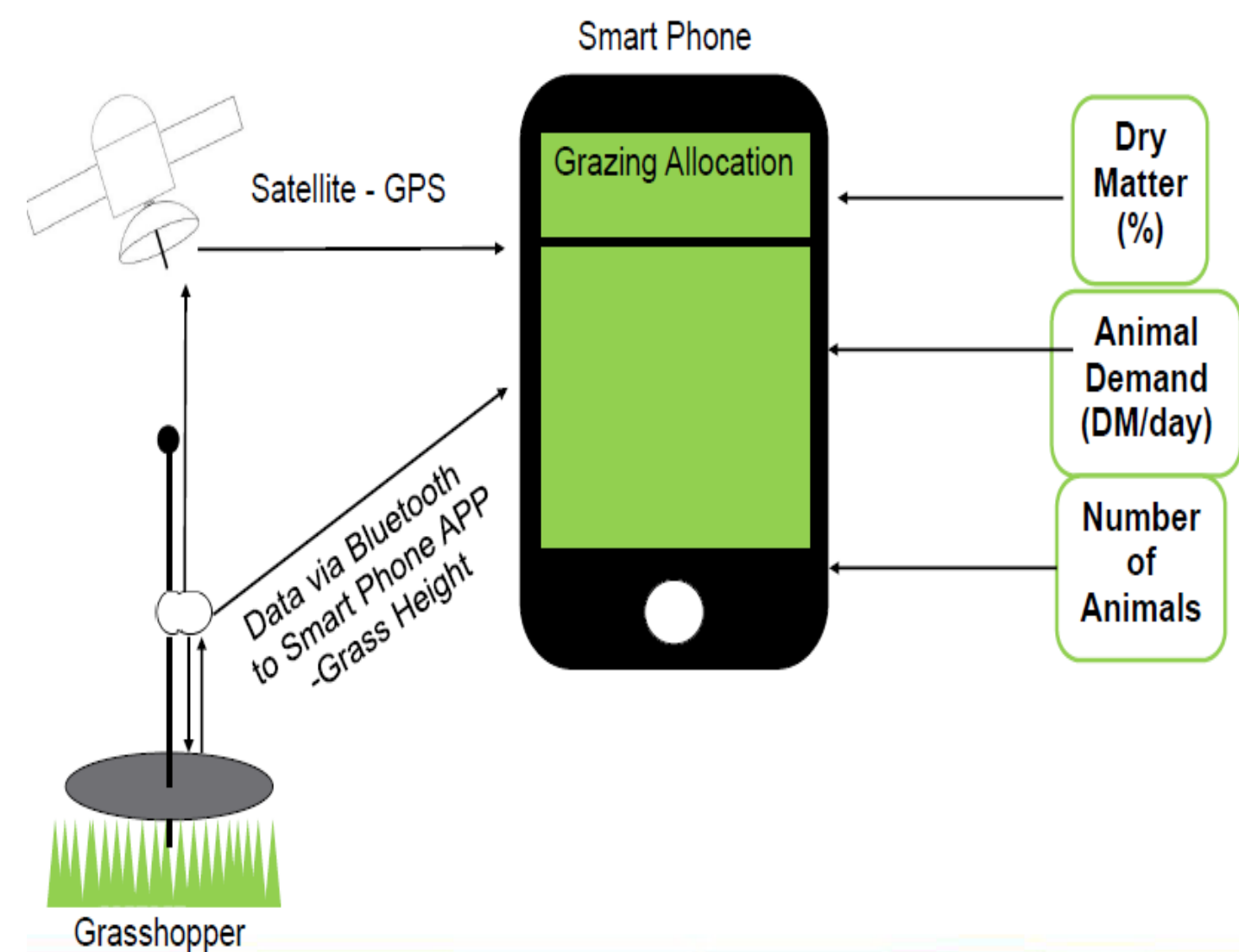


An Roinn  
Cultúir, Oidhreachta agus Gaeltachta  
Department of  
Culture, Heritage and the Gaeltacht





# Farm management



# Breeding programmes



## Cattle breeding

Economic breeding index

Beef data genomics programme

## Grass breeding (PPI)



# Forestry



Significant potential as a carbon sink

€482M of new investment

Annual afforestation target 8,000 ha

New grant rates Feb 2018

Forest-based biomass

- Gross demand to increase to 3.3 M m<sup>3</sup> by 2020 on an all island basis
- Demand likely to increase beyond 2020 (EU renewable energy targets)



# The challenge



- Animal numbers increasing
- Fertiliser use efficiency
- Greenhouse gases increasing
- Water quality not improving
- Effort sharing Regulation of the Climate and Energy Framework
  - Reduction of 30% below 2005 levels by 2030
- National Emissions Ceilings Directive
  - Reduction of 1% below 2005 levels by 2020 and 5% below 2005 levels by 2030 onwards

**Balance needed between production and environment**





# Conclusions



Progress essential

Fair action must be taken

Collaboration key

*“Environmental sustainability and economic sustainability are equal and complementary – one cannot be achieved at the expense of the other”*

