



OPTIMAL EU CLIMATE POLICY

# Desirable Climate Policy in the Agri-food Sector: Stakeholder Perspectives -insights from **CECILIA2050**

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# Objectives

- Assess the current policy mix in food and agriculture in terms of environmental effectiveness, economic efficiency, administrative feasibility, and political and legal feasibility, on the basis of extensive literature review and selected stakeholder interviews.
- The interviews were conducted in four countries: the UK, The Netherlands, Spain and Italy in May-June 2013.
- We included policy instruments that focus both on the producer (the farm, processing, distribution and retail) and on the consumer.

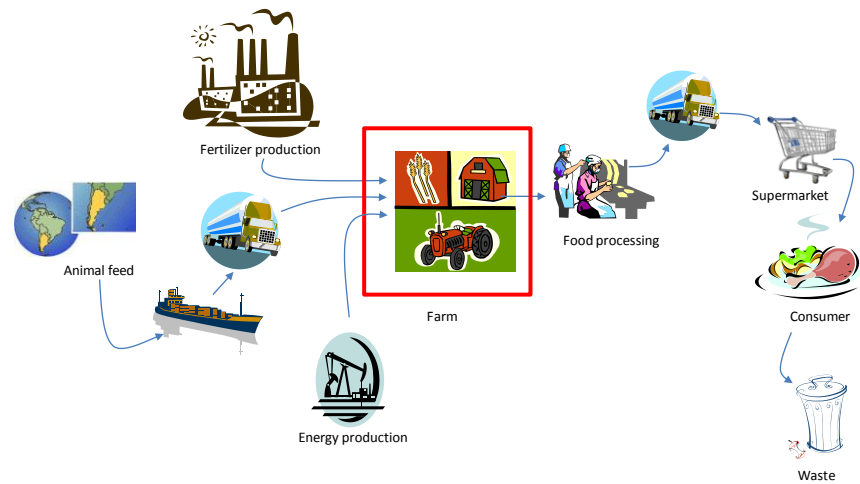
# Outline

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- The relevance of the agrifood sector in greenhouse gas emissions in EU-27 and the four selected countries;
- Greenhouse gas emissions mitigation instruments in the four countries;
- Stakeholder perspectives for climate change mitigation in the four countries;
- Conclusions.

# The agri-food sector

- 'All industrial and economic activities related to the supply chains of food and agricultural materials from the farm to final disposal.'



# Emissions from the agri-food sector: Netherlands and UK

Subsector	GHG emissions (million tonnes of CO2-eq.)	
	2005	2010
Agriculture and fisheries	27.8	28.9
- <i>Arable</i>	2.9	2.3
- <i>Horticulture</i>	7.8	10.4
- <i>Animal husbandry</i>	15.7	14.9
- <i>Fisheries</i>	0.8	0.6
Processing industry	3.1	3.1
Input supplying industry	9.4	9.3
Distribution	4.4	6.2
Agri-food total	44.7	47.5
% of national GHG emissions	23.1	24.3

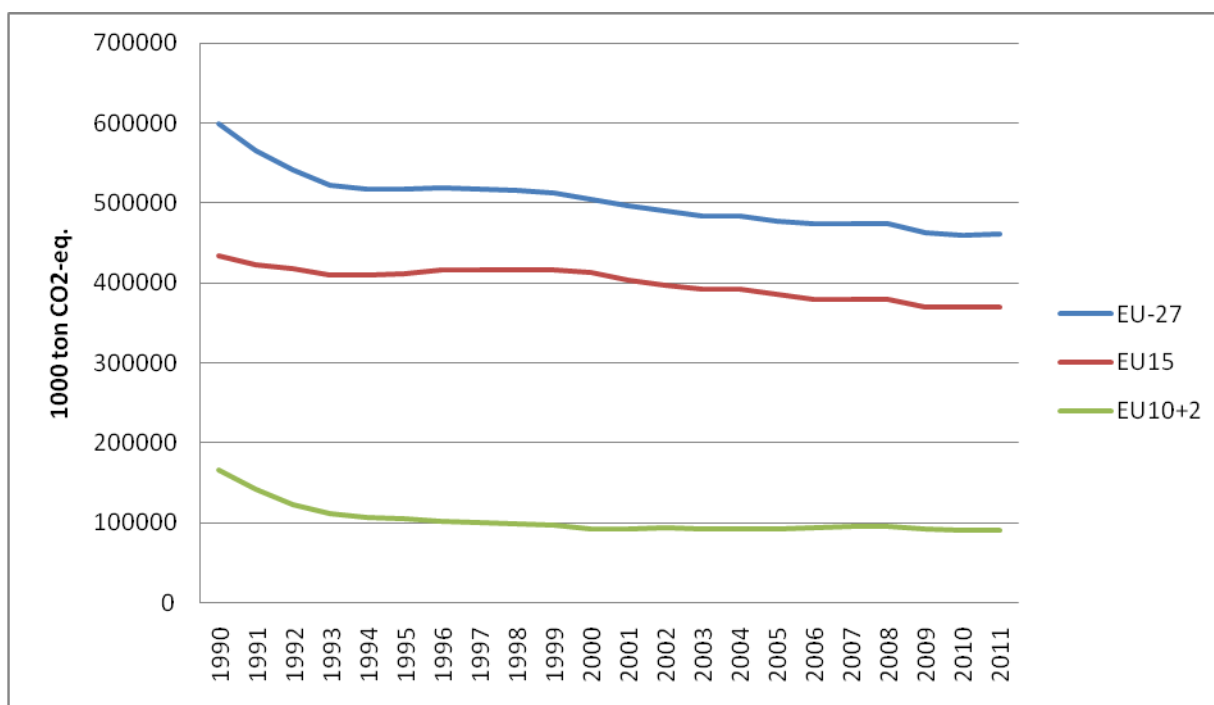
Source: Van Leeuwen et al. (2012)

Subsector	GHG emissions (million tonnes of CO2-eq.)
	2010
Agriculture and fisheries	54
Processing industry	13
Fertiliser	3
Commercial transportation	12
Retail	11
Catering	7
Households	19
Net trade (imports – exports)	77
Agri-food total	195

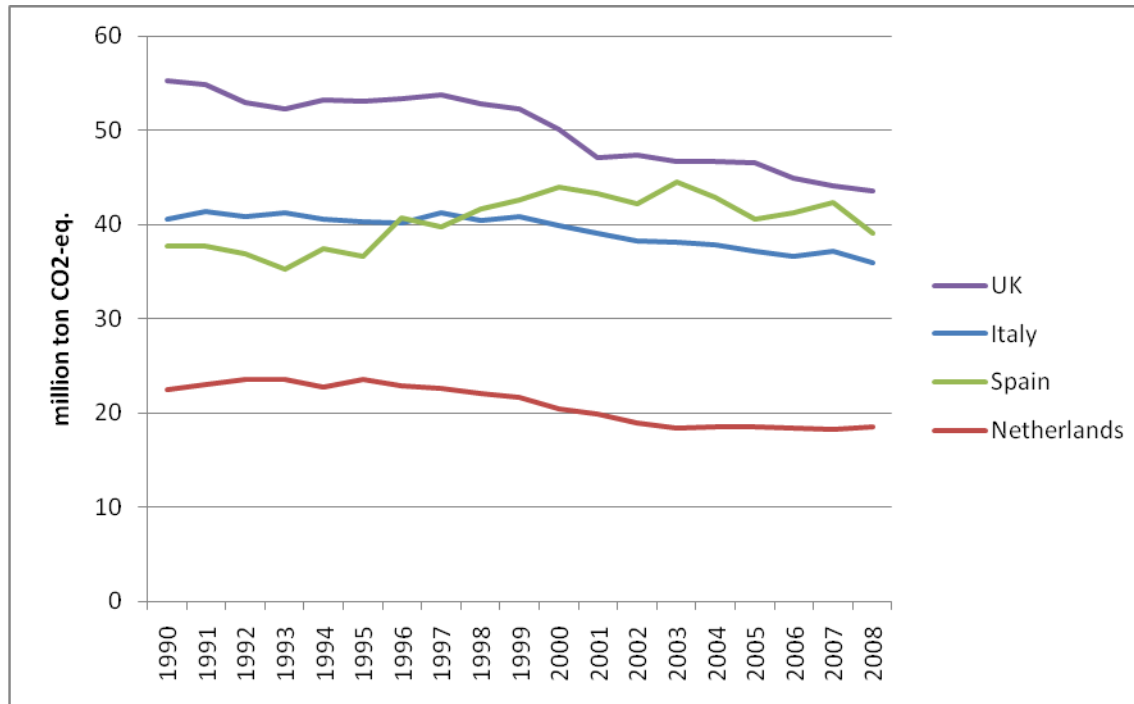
Source: DEFRA (2012c)

# Comparative emissions from the agricultural sector

- Agricultural emissions' (emissions from  $N_2O$  and  $CH_4$  from agricultural activities) amount to 461 million tonnes of  $CO_2$ -eq in 2011 or 10% of total EU27 emissions.



# Evolution of agricultural emissions in four selected countries (1990-2008)



# Greenhouse gas mitigation instruments: United Kingdom

- Under the Climate Change Act 2008, the UK Government is legally required to achieve an overall 80% reduction in greenhouse gas (GHG) emissions from 1990 levels across the UK economy by 2050.
- The Greenhouse Gas Action Plan (GHGAP) aims to improve awareness amongst farmers and growers of GHG emissions and drive the implementation of on-farm practices that reduce GHG emissions per unit of production.
- It was launched in 2010 by sixteen organisations representing the agricultural industry in England, led by the National Farmers Union, the Agricultural Industries Confederation and the Country Land and Business Association. It has set a reduction target of 3MtCO<sub>2</sub>-eq. by 2022 compared to a 2007 baseline.



# Greenhouse gas mitigation instruments: The Netherlands

- The Netherlands has had active energy-efficiency policies in greenhouse horticulture since 1993 in the form of negotiated agreements between the government and the sector and were supported by subsidies and tax incentive schemes.
- GLAMI (Covenant Greenhouse Horticulture and the Environment) (1998-2010). The objective was an improvement of energy efficiency by 65% in 2010 in comparison to 1980. This objective has been achieved.
- The Agrocovenant (2008) with the objective to produce a yearly amount of 32PJ from biomass in 2020.
- The MJA3-covenant (2001-2020) aiming at 30% energy-efficiency improvement in the non-ETS sectors from 2005 to 2020.

# Greenhouse gas mitigation instruments: Italy

- Rural development plans: agri-environmental payments for organic farming; actions aimed at afforestation of agricultural land; energy saving investments (e.g. in buildings, glasshouses etc.); diversification into non-agricultural activities (support for renewable energies, in particular biogas).
- The 'Carbomark' (2010) initiative aiming to set up a local market for carbon credits.
- The initiative 'COOP for Kyoto' (2006) invites suppliers of branded products to adopt measures to reduce energy consumption.
- The project 'Campagna amica' from the framers' union COLDIRETTI aiming at encouraging consumers to buy locally grown products.

# Stakeholder perspectives

#1.	In your view, which are the most important mitigation measures on climate change in regard to the agri-food sector?
#2.	What are the most important policy instruments in realizing these measures in your view that are in place at the moment?
#3.	How would you classify and evaluate the environmental effects/results of these policy instruments?
#4.	How would you classify and evaluate the economic costs and benefits of these policy instruments?
#5.	How would you evaluate equity and fairness concerns, associated with these policy instruments?
#6.	Given your previous responses, do you think this is the best instrument mix to mitigate climate change in the agri-food sector?
#7.	If not, what would be the most desirable instrument mix in your view? Why?
#8.	How can your desired instrument mix be realized? Which are the major constraints and opportunities towards achieving such a mix in your view?
#9.	Do you have any other comments or suggestions on the issue of policy instruments in the agri-food sector in regard to climate change?

# Stakeholder perspectives: United Kingdom

- Cost-effectiveness, or the economic side of the notion of optimality is considered fundamental for warranting the actual implementation of policy, as supply chain actors are driven financial incentives.
- Environmental effects are considered important but only after cost-effectiveness is ensured.
- Fairness concerns are also considered relevant and need to be taken into account in future policies.
- The development of voluntary initiatives within the context of a broader public framework is advocated as the best approach to achieve climate change mitigation.

# Stakeholder perspectives: The Netherlands

- Emphasize the need for clear targets and the need for continuity of government policies, on which innovative strategy and the time span for return on investments (5-10 years) could be based.
- Also underline the need to target consumers in future mitigation strategies and as pressure groups fostering change in supply chain practices.

# Stakeholder perspectives: Italy

- Need for the development of remunerative incentive schemes for farmers instead of stricter regulations.
- The mitigation potential of agriculture should be taken into account when setting targets for emissions reductions, and the burden of the costs in implementing these measures should be equally distributed throughout the supply chain.
- Need for an overarching target set on a national base.
- Policy mix should be not overcomplicated to avoid administrative burden.
- Information campaigns for Italian consumers should emphasize the 'traditionality' of products to be more effective.

# Stakeholder perspectives: Spain

- The interviewees found it hard to define the most important mitigation measures in Spain or prioritising them.
- Emphasized the importance of setting environmental targets as an incentive for voluntary initiatives.
- Underlined the need to adopt policies that do not further disadvantage the farmers nor the consumers.
- The main stumbling block for Spain is the lack of policy coordination, lack of stakeholder consultation processes, weaknesses in implementation and budgetary constraints.

# Conclusions

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- First, the need for an EU-wide policy for climate change mitigation in the agri-food sector that would provide a level playing field for EU farmers was emphasized in all cases.
- Second, the need to develop policies that target the whole supply chain in an integrated manner and the need to avoid a piecemeal approach is considered important. For this to be achieved the development of comparable data on agri-food emissions in all EU MS is a necessary step.
- Third, the role of government is perceived as crucial in terms of providing a general framework within which voluntary approaches could further develop.



감사합니다 Natick  
Grazie Danke Ευχαριστίες Dalu Obrigado  
Thank You Köszönöm  
Спасибо Dank Gracias  
谢谢 Merci Seé  
ありがとう