

# HOW WILL EU CLIMATE ADAPTATION STRATEGIES AFFECT EU AGRICULTURAL POLICIES

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# OUTLINE

1. Climate change and agriculture: the challenge
2. Analytical framework: policy integration
3. EU adaptation strategy
4. Integration of climate adaptation into agricultural policies
5. Conclusion: how will adaptation strategy affect agricultural policy?

# Climate change: The challenge

## Changes

- Longer term changes in precipitation and temperatures
- Year-to-year variability and extreme events

## Impacts

- Volume, quality and stability of food production
  - Risks: decreased crop productivity, water scarcity and increased irrigation needs, flooding; soil quality degradation; desertification, livestock production
  - Opportunities: increased crop productivity, water abundance, livestock production
- Indirect effects on natural environment

## Regional variation

# Climate adaptation in agriculture

- Adapting food production to changing climate
  - Farm-level: Adjustment of farm management
  - Sector level: policy, planning and research
- Providing ecosystem services
  - Efficient use and management of water
  - Prevent biodiversity loss, ensure connectivity
  - Contribute to multifunctional landscapes

# Our question

- How will the EU adaptation strategy affect agricultural policies?

# Analytical framework

## 4.3. Climate-proofing EU action: promoting adaptation in key vulnerable sectors

One priority and responsibility for the Commission is to mainstream adaptation measures into EU policies and programmes, as the way to ‘climate-proof’ EU action.

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- FROM: An EU strategy on Adaptation to climate change COM (2013)216 Final

## Policy integration

- Inclusion, consistency and weighting (Brouwer et al. 2013)
- (Reporting)
- Instruments

# Analytical strategy

## Content analysis of

- Main EU agricultural policies, CAP
- Directives relevant for environmental impact and delivery of ecosystem services:
  - Water framework directive
  - Nitrate directive
  - Habitat directive

# EU CLIMATE ADAPTATION STRATEGY

- Action 6: Facilitate the climate-proofing of the Common Agricultural Policy (CAP)
- Four broad types of instruments
  1. Improved framework for sustainable management of resources
  2. Financial support through rural development fund for targeted measures
  3. Research and innovation: EIP on agricultural productivity and sustainability
  4. Knowledge transfer
- Partnership agreements: reporting

# Proposed CAP

- Inclusion of climate adaptation as objective
  - *Objective 2: Sustainable management of natural resources and climate action* includes climate adaptation
  - In the direct payment regulation
  - In the rural development programme
    - Two of six priorities relate to climate adaptation
    - Cross cutting objectives to be pursued horizontally include climate change adaptation

# Ecosystem impacts 1

- Water Framework Directive (2000/60)
  - Objective: to promote sustainable water use ...to contribute to mitigating the effects of floods and droughts
  - Consistent with adaptation objectives
    - Ensure efficient water management
    - Ensure water quality through water management practices

# Ecosystem impacts II

- Nitrate directive (91/676/ECC)
  - Objective: to reduce water pollution from nitrates coming from agricultural sources.
  - Consistent with adaptation objectives
    - Efficient use of resources
      - water management, preventing runoff

# Ecosystem impacts III

- Habitat directive, 92/43/EEC
  - Objective: to promote the maintenance of biodiversity
  - Consistent with adaptation objectives
    - preventing biodiversity loss through multifunctional landscapes with connectivity
    - Improved pest management through crop rotation, monitoring etc.
  - Consistent with agricultural production?

# Policy consistency?

- Consistency with other policy objectives
  - Viable food production: farm income and limiting variability ✓
  - Water management and biodiversity policies ✓
- Consistency not explicitly addressed
- No weighting of policy objectives

# Adaptation in CAP - Instruments

- **Single payment (income support):**
  - Greening: 30 percent of income support
  - Cross compliance to include climate actions
- **Rural development fund**
  - Targeted support to large array of adaptation measures

# Conclusion: policy integration

- Adaptation is included in CAP
- No major policy inconsistencies
- But no weighting of multiple policy objectives

So: does this mean adaptation strategy was effective?

# Conclusion: policy effectiveness?

- Consistent objectives, but competing for attention and distribution of funding?
- Compulsory measures vs. voluntary measures
- Farmers: attention and motivation?
  - Perception of adaptation: supporting production (adapting to weather variability, business as usual)?
  - Broader ecosystem services