



## A greener agriculture for a bluer Baltic sea

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# Outcome-based approaches in agri-environmental payments and their potential role in a "new" CAP

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## Introduction (1/5)

- **Agri-environment schemes (AES) central element of the Rural Development Regulation (RDR) in seeking to secure certain environmental public goods.**
- **EU expenditure on agri-environment measures amounts for 2007 - 2013 to over 20 billion EUR or 23 % of the expenditure for rural development.**

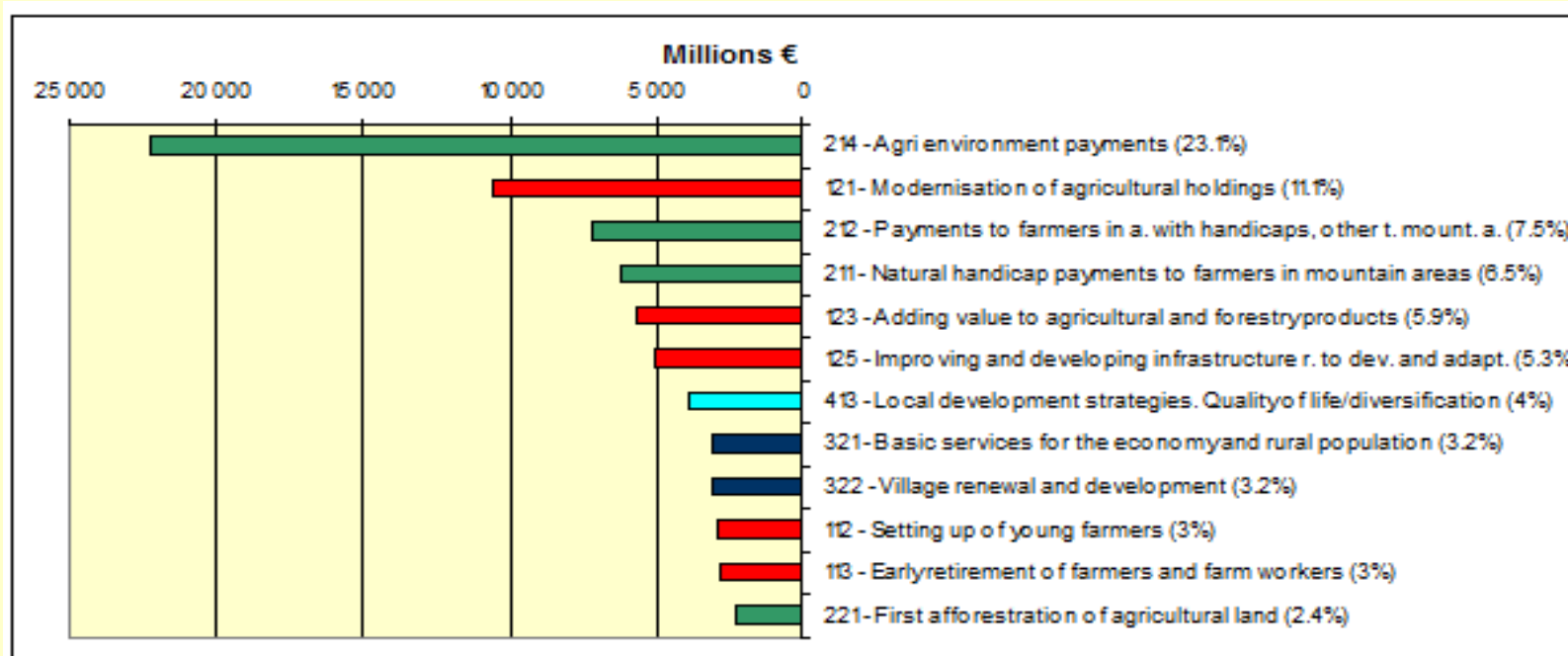


Figure 1: Breakdown EU Rural Development spending 2007-2013 (Matthews, 2011)

## Introduction (2/5)

**Table: Expenditure declared by the Member States by rural development measure in 2007 and in 2008**

Priority 1	401.6	16.0%	1 289.0	21.3%
211 Payments to farmers in mountain regions (natural handicaps)	382.5	15.2%	878.6	14.5%
212 Payments to farmers in areas with handicaps, other than...	323.5	12.9%	1 011.1	16.7%
213 Natura 2000 payments and payments linked to the Direct...	1.8	0.1%	10.4	0.2%
214 Agri-environmental payments	1 204.0	47.6%	2 312.0	38.1%
215 Animal protection payments	10.5	0.4%	40.1	0.7%
216 Non-productive investments	0.8	0.0%	4.1	0.1%
221 Initial afforestation of agricultural land	82.8	3.3%	191.8	3.2%
222 Initial establishment of agro-forestry systems on...	-	0.0%	-	0.0%
223 Initial afforestation of non-agricultural land	1.5	0.1%	5.3	0.1%
224 Natura 2000 payments	-	0.0%	0.2	0.0%
225 Forestry-environmental payments	0.4	0.0%	4.9	0.1%
226 Restoring forestry potential and introducing prevention	38.1	1.5%	62.8	1.0%
227 Non-productive investments	8.5	0.3%	25.2	0.4%
Priority 2	2 054.3	81.6%	4 546.5	75.0%
311 Diversification to include non-agricultural activities	9.6	0.4%	11.2	0.2%
312 Creation and development of companies	0.3	0.0%	5.9	0.1%
313 Promotion of tourist activities	4.2	0.2%	15.2	0.3%
321 Basic services for the economy and the rural population	10.7	0.4%	21.7	0.4%
322 Renewal and development of villages	17.5	0.7%	29.6	0.5%
323 Conservation and improvement of rural heritage	7.4	0.3%	23.4	0.4%
331 Training and information	0.4	0.0%	1.6	0.0%
341 Acquisition of skills, animation and implementation of...	0.5	0.0%	6.0	0.1%
Priority 3	50.7	2.0%	114.7	1.9%

Source: EC (2009)

## Introduction (3/5)

- **AES offer payments for adherence to management prescriptions rather than making payments conditional on realisation of the benefits themselves.**
- **Pragmatic response to the measurement and monitoring problems associated with many environmental benefits and international regulations (WTO).**

## Introduction (4/5)

- Payments based on agricultural opportunity and compliance costs have limited ability to directly target (different levels of) environmental outcomes
- Definition of inflexible management requirements often less successful in achieving desired environmental outcomes
- Horizontal measures (large amount of farmers, large area, limited demands on farmers' practice) dominate and cover most of the supported area
- Fewer deep and narrow schemes designed to address specific environmental needs in specific areas

## Introduction (5/5)

- In this context, a recent report of the European Court of Auditors recommends:
  - Better justification for measures targeted at maintenance
  - Assessing costs and benefits of improved geographic targeting
  - Setting quantified targets for participation levels based on the environmental needs, then defining the budget needed
  - Exploring the implementation of outcome-based measures, tenders and collective contracts
- It is thus not that surprising that outcome-based AEMs have received increasing attention



## Objectives

- To stimulate discussion on the future role of outcome-based approaches in a “new” CAP
  - Brief overview of outcome-based AEMs
  - Brief overview of some key elements of the new legal proposals
  - Explore some key issues/questions for an outcome-based approach in a “new” CAP



## Outcome-based AEMs (1/6)

### Key characteristics and advantages:

- **Outcome** → Linking payments to specific environmental targets
  - ☞ Payments are conditional to outcome-based indicators
  - ☞ Payments take into account different ecological qualities
- **Close links between farmers actions and environmental outputs to ensure outcomes can be measured and payments justified.**
- **Outcome-based approaches reward producers for the quantity and quality of the final products**
- **High involvement of farmers in the negotiation process builds stronger commitments of (and with) the farmer and active conservation management**



## Outcome-based AEMs (2/6)

- Closer to the notion of markets
- Local environmental knowledge and cultural capital is utilised and long term commitments can be facilitated.
- Risk mitigation through flexibility (e.g. no fixed dates for management activities)
- Risk mitigation through income diversification by the production of verifiable ecological goods
- Good acceptance and uptake by farmers
- But important to emphasise: Change in reference systems not in payment calculations

## Outcome-based AEMs (3/6)

**Table 2.1: Overview of outcome-based AEMs in Europe  
(biodiversity grassland, plant species)**

Examples	Country / Region	Objective	Ecological targeting	Outcome-based mechanism
Farm Conservation Scheme	Peak District National Park, England	Biodiversity conservation on meadows and pastures	Plant species / grassland habitat	Payments based on indicator species and differentiate between different ecological qualities
East of Scotland Grassland Management Scheme	Eastern Scotland	Biodiversity conservation on lowland fen and grassland	Plant species / grassland habitat	Payments based on habitat indicators
MEKA programme (RDP)	Baden-Württemberg, Germany	Biodiversity conservation on grasslands	Plant species / grassland habitat	Payments based on indicator species/genera
Conservation of semi-natural grassland	Case study areas in Lower Saxony, Germany	Biodiversity conservation on grasslands	Plant species / grassland habitat	Payments based on indicator species and differentiate between different ecological qualities
Conservation and enhancement of species-rich grassland (RDP)	Brandenburg, Germany	Biodiversity conservation on grasslands	Plant species / grassland habitat	Payments based on indicator species
Preservation and advancement of biodiversity on farmland	Switzerland	Biodiversity conservation on grasslands	Plant species / grassland habitat	Payments based on indicator species

Source: Expanded based on Schwarz et al. (2008)

## Outcome-based AEMs (4/6)

**Table 2.2: Overview of outcome-based AEMs in Europe (biodiversity, animal species)**

Examples	Country / Region	Objective	Ecological targeting	Outcome-based mechanism
Meadow Agreement Birds	Netherlands	Conservation of breeding waders	Animal species / grassland habitat	Payments for the number of clutches on the farm land
Conservation Performance Payments	North Sweden	Conservation of carnivores on reindeer grazing land	Animal species	Payments per carnivore offspring, also differentiating between regular and occasional occurrence
Breeding Contracts Birds	Local area in Schleswig-Holstein, Germany (Stapelholmer Naturschutzvereine )	Conservation of breeding birds and bird colonies	Animal species / grassland habitat	Payments for endangered bird species differentiated between single breeding birds and entire colonies

Source: Expanded based on Schwarz et al. (2008)

## Outcome-based AEMs (5/6)

**Table 2.3: Overview of outcome-based AEMs in Europe (landscapes)**

Examples	Country / Region	Objective	Ecological targeting	Outcome-based mechanism
Oekopunkte-Programme	Federal State of Lower Austria	Maintenance and enhancement of the ecological and recreational value of cultural landscapes	Farm habitats	Payments based on accumulated bonus points for specific actions and outcomes

**Table 2.4: Overview of outcome-based AEMs in Europe (water quality)**

Examples	Country / Region	Objective	Ecological targeting	Outcome-based mechanism
Reduction of nitrate leaching	Simulation/modelling experiment for AEMs in Brandenburg	Enhancement of water quality	Diffuse pollution / water catchments	Payments indirectly linked with outcomes through highly targeted management prescriptions
Reduction of N-emissions (RDP)	Brandenburg, Saxony Anhalt, and Thuringia	Enhancement of water and air quality	Diffuse pollution / water catchments	Payments linked with field N-surpluses as indicators; some management prescriptions defined

Source: Expanded based on Schwarz et al. (2008)

## Outcome-based AEMs (6/6)

- Environmental targeting:
  - grassland biodiversity with plant species indicators
  - Very few examples on other ecosystem services
- Reflection of efforts associated with the scheme implementation and monitoring
- Outcome-based mechanism: species indicators, less clear distinction from action-based measures in other examples
- Dynamic field, new examples emerge on a regular basis
- Implementation in German RDPs confirms conformity with the current institutional framework of the CAP



Is there a role for outcome-based approaches in Pillar 1?

## New legislative proposals (1/7)

**Main aspects of the proposals:**

- **New design of direct payments**
- **Redistribution of direct payments**
- **Market instruments (CMOs)**
- **New framework for rural development**
- **Common monitoring and evaluation framework for both Pillars**



## New legislative proposals (2/7)

### New design of direct payments

➤ Member States have to implement:

- Base payment
- Green payment (30%)
- Young farmers scheme (max. 2%)

➤ Member States can to implement:

- Coupled support (max. 5% or 10%)
- Support for natural constraint areas (max. 5%)

➤ In addition: Small Farmer Scheme (max. 10%)

All subject  
to cross-  
compliance

## New legislative proposals (3/7)

### The Green Payment

➤ All farms deliver environmental and climate benefits:

1. improvement of the resilience of soil and ecosystems through crop diversification
2. retention of soil carbon and grassland habitats associated with permanent pasture
3. the delivery of water and habitat protection by the establishment of ecological focus areas

➤ But...greening must be as simple as possible with measures that have an environmental impact **and are manageable / controllable without major extra cost**

## New legislative proposals (4/7)

### Conditions for the Green Payment

#### ➤ Crop rotation

- At least three different crops with each crop cultivated between 5% and 70% of the arable land
- If more than 3 hectares and not entirely used for grass production
- Standard practice on most farms

#### ➤ Permanent grassland

- Areas of permanent grassland must be maintained (as registered for the 2014 entitlements - reference areas)
- A max. of 5% of the reference area can be converted
- Risk of conversion of grassland before 2014?

## New legislative proposals (5/7)

### Conditions for the Green Payment

- Ecological focus areas
  - 7 % of the eligible hectares of a farm
  - Fallow land, terraces, landscape features, buffer strips and afforested areas
- National / regional flat rate payment
- No differentiation of environmental qualities or outcomes
- Horizontal measure: Focus on maintenance
- Monitoring: *"framework shall include...in particular the direct payments, market measures, rural development measures and of the application of cross compliance."*
- CMEF - fit for purpose? (Counterfactuals, consistency between different indicator levels, cross compliance and AEMs)

## New legislative proposals (6/7)

### Rural development - agri-environment

- No axes, but options for thematic sub-programmes
- Agri-environment-climate payments
  - Based on additional cost and income foregone
  - Beyond mandatory standards
  - 25% of the RDP budget must be allocated to climate change mitigation and adaptation and land management: i.e. agri-environment-climate payments, organic farming and natural constraint payments
  - Payments for Natura 2000 areas and river basin areas continue

## New legislative proposals (7/7)

### Green payment and agri-environment-climate payments

- Green Payment for maintenance in Pillar 1 - more scope for higher level measures in Pillar 2 (?)
- Two layers of maintenance payments - scope for synergies (?)
- Longer term perspective: Maintenance payments in Pillar 1, enhancement payments targeted to specific territorial environmental needs in Pillar 2 (?)
- Is there an argument for more environmentally targeted approaches such as outcome-based approaches in both Pillars?



## Outcome-based approaches in the Green Payment (1/2)

- Outcome-based approach would take into account different environmental qualities of the ecological focus areas
- Implementation of outcome-based approaches in maintenance schemes relatively simple
- Outcome-based approach could provide motivation for farmers to choose the “environmentally right” areas
- Existing examples are mainly single objective schemes
- Green payment would require multiple objective approach:
  - Increase in the complexity of the design and monitoring
  - Conflict with the defined key requirement of “no extra cost”

## Outcome-based approaches in the Green Payment (2/2)

Four questions arise:

- Would farmers buy into more complex outcome-based schemes?
- Would policy-makers buy into more complex outcome-based schemes?
- What are the monitoring requirements of an outcome-based Green Payment?
- Would an outcome-based approach increase the cost-effectiveness of the Green Payment?

## Conclusion

- Outcome-based schemes are an (not the) useful alternative to standard action-based measures
- Experience should be expanded through further prototype development and implementation
- Given the current EC proposal, higher administration cost likely to prohibit inclusion in the Green Payment at this stage.
- Suitability of outcome-based approaches for the Green Payment should be further examined for future reforms
- What is the next logic step in the reform process of direct payments:

? Merging maintenance measures in a Green Payment and focus AEMs on enhancement in Pillar 2 ?