

### **AGRIGRID**

#### Workshop 2

Review of payment calculations in rural development measures in the EU

WP 2

## Agrienvironmental schemes

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## Agrienvironmental schemes

- Reg. EC 1698 /2005 § 36 point a. iv and § 39.
- Voluntary agrienvironmental commitments
- Income forgone + Additional cost incurred + Transaction cost.

Annual crops 600 €/ha

Specialised permanent 900 €/ha

Other land uses 450 €/ha

Rare breeds 200 €/LU





# Agrienvironmental measures during the 2007 – 2013 programming period The project

9 Member States represented 186 different schemes

## Our strategy

- One common -Organic farming
- Two (at least) country region specific





## The timing

- Still in the negotiation process
- Some RPDs approved already.
- Payment calculations an issue
- Bad timing or

opportunity?





## Categories

- According to main objectives
  - Natural Resources
    - Water
    - Soil
  - Biodiversity
    - Genetic
    - Wildlife
      - Protection, maintenance and enhancement of agro-ecosystems
  - Landscape
  - Holistic approaches
    - Organic farming
    - Integrated production





## Other approaches

- Precision agriculture approaches
- Management plans as main commitments

Multi –objective schemes





## Natural resources Soil

#### **Spain (Basque Country)**

- Soil protection in extensive crops
- Soil protection in permanent crops

#### Italy (Veneto)

- Improvement of soil quality / Organic matter
- Improvement of soil quality / Organic fertilization

#### **Poland**

- Protecting soil and water
  - Undersown crop
  - Winter intercrop
  - Stubble intercrop

#### Greece

- livestock farming extensification
- protection of stone terraces





## Natural resources Water

LT	Landscape stewardship scheme	management of wetlands
	Scheme for improving the bodies at risk	ne status of water belts of water bodies in against pollution and soil
		shore belts and slopes of melioration ditches
	Scheme for improving the status of water bodies at risk	
PL	Buffer zones	
		Winter intercrop
		Stubble intercrop
	Creation and Managemen reduce diffuse pollution	t of Water Margins to
U K		Creation and Management of Water Margins to reduce diffuse pollution





## Genetic biodiversity (1)

DE – NRW	Diversification of crop rotations pursuant to the 'Joint task for improvements of Agricultural Structure and Coastal protection' (GAK) "national framework regulation" (Crop rotation diversification on arable land).	
ES BC	Environmental protection in extensive dryland crops by rotation and alternatives to cereal.	
ES BC	Biodiversity conservation in crop rotations	
FI	Crop diversification (in support areas A and B) <sup>D)</sup>	

ES BC	Local beans cultivation
FI	Cultivation of local crops
GR	Conservation of extensive crops from genetic erosion risk
IT	Biodiversity / Biodiversity keepers (growers)





## Genetic biodiversity (2)

ES BC	Local breeds conservation	
ES N	Conservation of rare livestock breeds (maintaining native rare breeds)	
FI	Raising local breeds	
GR	Conservation of threatened local breeds	
IT	Biodiversity / Biodiversity keepers (breeders)	
LT	Rare Breeds Scheme	
PL	Preservation threatened genetic resources of animals in agriculture	
	Preservation local breed cattle Preservation local breed horses	
	Preservation local breed sheep Preservation local breed pigs	





## Biodiversity 3 practices

Water Margins **UK** 

Creation and Management of Water Margins to enhance biodiversity interest

**CZ** Landscape management

Bio-belts

Ecological corridors, buffer strips, hedgerows and little woods / Care and improvement of existent buffer strips, hedgerows and little woods

ES BC

IT

Phytosanitary treatment machinery verification by homologated company

Rational phytosanitary treatment

Pest integrated control

**FI** Use of pest monitoring methods





## Biodiversity 4 specifically targeted

Grassland maintenance

CZ

Bird habitats on grassland – waders' nesting site

Bird habitats on grasslandcorncrake's breeding site

ES BC

Fauna conservation in crop rotations





#### Biodiversity Agroecosystems

Grassland maintenance Meadows (basic management)

Mesophilic and hygrophilic meadows (MHM)

Mountain and xerophilous meadows (MXM)

Permanently waterlogged and peatland meadows

Pastures (basic management)

Species rich pastures

Dry steppe grasslands and heathlands

Species Rich Grassland Creation and management of species rich grassland

Management of species rich grassland

Management of species rich grassland for corn buntings

PL

**UK** 

Preservation of threatened species of birds and natural habitats not covered by Natura 2000 Meadows moorgrass and selernicowe

Warmlikes meadows

Semi natural wet – hay meadows

Semi natural meadows fresh habitats

Traditional orchards







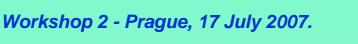
#### Landscape

Cultivation of catch crops on arable land or cultivation of grass under permanent crops

.T	Landscape stewardship scheme:	management of natural and semi-natural meadows
		management of wetlands
		management of shore belts of water bodies in meadows
		protection of water bodies against pollution and soil erosion on the arable land
		stubbly field in winter season
		strips or plots of melliferous in the arable land
		management of the holding landscape elements
		management of protection shore belts and slopes of melioration ditches
		management of the environment of small cultural elements

Ecological corridors, buffer strips, hedgerows and little woods / Care and improvement of existent buffer strips, hedgerows and little woods

Ecological corridors, buffer strips, hedgerows and little woods / Establishment of new buffer strips and single-row hedgerows





IT



#### Precision agriculture

Additional measures for horticultural farms

More accurate nitrogen fertilisation on horticultural crops

**Finland** 

Use of pest monitoring methods

#### Integrated production

cz Fruit, vegetable, vines

DE-MWP Fruit, vegetables

ES BC

GR Cotton





#### Country region specific schemes

#### Measures / Sub - measures examined

<ul> <li>Integrated</li> </ul>	1
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<ul><li>Water</li></ul>	16
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10	Biodiversity	•
1	Biodiversity	•





## Payment differentiations 1

Organic livestock as grassland or pastures

 Germany, Czech, Scotland, Lithuania, Italy (V), Poland

or different scheme

• Spain, Finland, Greece

Conversion – Maintenance of organic farming practices

 Germany NRW, Italy, Poland and Scotland more long term





## Payment differentiations 2

Regional – territorial variation

• Germany, Finland in crops, Greece

According to crop types including some times specific crops Olive, varieties of vineyards

Per type of animal

Farm size in organic scheme in Poland and Navarra





## Income - Cost changes

- Only income forgone due to estimated reduction of yield....
- inclusion of all cost and income elements in a comparative accounting exercise
- Including only the specific changes identified
- Using broad cost categories like 'direct', 'other', 'additional'.
- Direct statement of difference between participants and non participants.





## Additional costs (not transaction)

- Control
- Necessary changes
- Lack of knowledge
- Bookkeeping
- Monitoring





#### Transaction costs

- Some cases not included CZ, DE
- No justification provided or ....
- Full justification





## Calculation approaches

Gross margins were compared for participants and non participants

#### Three approaches

- Complete accounting exercise for both participant and non participant using either survey or existing FADN data.
- 2. By using non participant as a starting point calculating changes due to participation.
- By stating the differences in cost elements and adding them up.





#### Reference

- Usually one or two representative crops for the whole type. In the case of arable crops representative rotations were also used.
- Reference years depended highly on availability of data, when there was a possibility to use FADN data then the average of a whole period was calculated.



#### Data sources

- Farm Accountancy Data Network
- National Regional Statistics
- Specific Studies Surveys
- Local Regional National economic indicator documents
- Own surveys
- Expert consulting





#### **Problems**

Data availability

Data reliability

#### Solutions

- Assumptions
- Data mining
- Expert consulting
- Own survey

- Expert consulting
- Comparison with other data





## Concluding remarks

- Agrienvironmental measures were intended to allow space for the different environmental conditions.
- Administrative structure and function is varying.
- The result: 9 partners 186 schemes that can be analysed further to land use and management practices.
- A variety of approaches used to deal with the data availability problem.
- Data availability/reliability a common problem
  - Some of the schemes new
- The difficulties in calculation of payments an impediment for innovations.
- Administrative management perplexities may affect environmental performance.

A lot of work has to be done



