



**DEVELOPMENT AND APPLICATION OF NEW METHODOLOGICAL
FRAMEWORKS FOR THE EVALUATION OF ENVIRONMENTAL
IMPACTS OF RURAL DEVELOPMENT PROGRAMMES IN THE EU**

**REPORT ON THE REVIEW OF THE EVALUATION INDICATOR
AND MONITORING FRAMEWORKS
WP2**

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Objectives

- To review the strengths, gaps and challenges of existing indicator and monitoring frameworks
- To recommend evaluation indicators to be incorporated into the methodological frameworks of the evaluation tools and tested in the public good case studies

Procedure 1

Having the environmental public good in focus as the starting point, relevant RD measures are going to be identified.

Existing and applied indicator sets are reported and the evaluation methods used to estimate changes.

Procedure 2

For each of the public goods relevant for agriculture literature review

- **Formal evaluation reports**
- **rural development evaluation network documents**
- **indicator frameworks and reports published by the OECD, EEA, Eurostat and JRC**
- **EU projects (e.g. Agrienvironmental Footprint, BioBio, C-CAT, LUCAS and PAIS)**
- **and evaluation studies commissioned by the Member States**

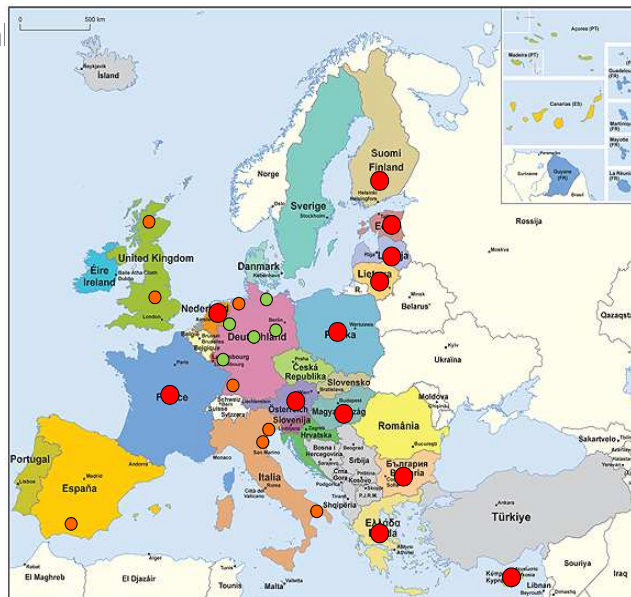


Procedure 3

Technical meetings with national and regional evaluation experts and representatives from managing authorities.



25 Mem



n reviewed



Public goods examined

- Climate Change
- Water quality
- Biodiversity High Nature Value Areas
- Biodiversity – wildlife
- Soil
- Landscape
- Animal welfare



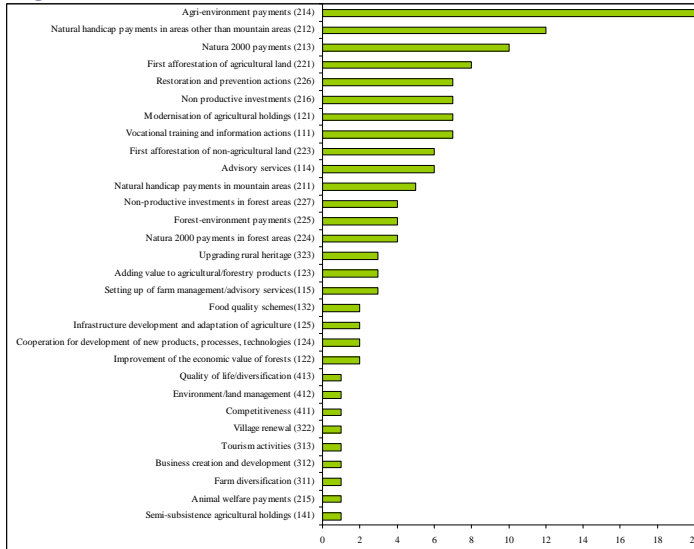
Public goods and RDP measures

Rural development measures targeting each public good

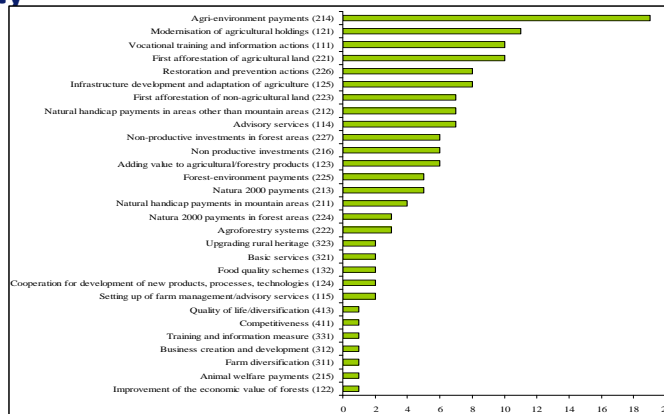
Public goods	RD measures
Climate change	156
Biodiversity – wildlife	133
Biodiversity HNV	126
Water quality	142
Soil	138
Landscape	150
Animal welfare	51



Some preliminary results: RDP measures targeting Biodiversity-wildlife



Some preliminary results: RDP measures targeting water quality



Public goods as objectives of measures (Overall picture)

Food quality schemes (132)	2	2	2	2	2	0	2	12
Agroforestry systems (222)	18	20	18	19	18	18	50	118
Farm diversification (311)	18	7	80	10	11	74	50	60
Basic services (321)	3	0	0	2	2	5	0	12
Business creation and development (312)	5	12	10	7	9	13	0	58
	13	7	4	11	10	4	9	58
Cooperation for development of new products, processes, technologies (124)	14	8	9	19	8	70	0	57
Semi-subsistence agricultural holdings (141)	13	7	19	8	9	30	2	57
Quality of life/diversification (413)	19	6	90	7	8	58	0	46
Tourism activities (313)	5	6	60	70	70	44	0	38
Competitiveness (411)	4	19	60	5	5	7	0	39
Training and information measure (331)	90	40	50	6	4	62	0	34
Environment/land management (412)	20	7	5	60	50	5	0	39
Adaptation of demanding EC standards (131)	60	40	40	50	60	50	0	39
Producer groups (133)	20	50	50	40	60	60	11	29
Adding value to agricultural/forestry products (123)	7	3	3	6	4	2	2	27
Infrastructure development and adaptation of agriculture (125)	5	2	1	8	5	5	0	26
Upgrading rural heritage (323)	1	3	3	2	2	12	0	23
Natura 2000 payments in forest areas (224)	4	4	5	3	3	3	0	22
Setting up of farm management/advisory services (115)	1	3	3	2	2	2	1	14
Animal welfare payments (215)	0	1	1	1	0	1	9	13
Village renewal (322)	2	1	0	0	0	10	0	13
Improvement of the economic value of forests (122)	2	2	3	1	1	2	1	12

Public goods as objectives of measures (the 11 first of the list)

Measure	Climate change	Biodiversity – wildlife	Biodiversity HNV	Water quality	Soil	Landscape	Animal welfare	Total
Agri-environment payments (214)	18	20	18	19	18	18	5	116
Vocational training and information actions (111)	12	7	8	10	11	7	5	60
Natural handicap payments in areas other than mountain areas (212)	5	12	11	7	9	13	2	59
Modernisation of agricultural holdings (121)	13	7	4	11	10	4	9	58
First afforestation of agricultural land (221)	14	8	9	10	8	7	1	57
Restoration and prevention actions (226)	13	7	10	8	9	3	1	51
First afforestation of non-agricultural land (223)	10	6	9	7	8	5	1	46
Advisory services (114)	5	6	6	7	7	4	4	39
Natura 2000 payments (213)	4	10	6	5	5	7	2	39

Causal links reported (the full picture)

Measure	Public goods causally linked	Causal links encountered
111 Vocational training and information actions	4	4
114 Use of advisory services by farmers and forest holders	4	4
115 Setting up of farm management, farm relief and farm advisory services, as well as forestry advisory services		
121 Modernisation in agricultural holdings	1	1
123 Adding value to agricultural-forestry products	3	8
125 Infrastructure development and adaptation of agriculture	3	5
211 Natural handicap payments to farmers in mountain areas	2	5
212 Payments to farmers in areas with handicaps, other than mountain areas	3	3
213 Natura 2000 payments	3	4
214 Agri-environment payments	3	6
216 Support for non productive investments	4	7
221 First afforestation of agricultural land	3	4
222 First establishment of agroforestry systems on agricultural land	4	6
223 First afforestation on non-agricultural land	1	1
224 Natura 2000 payments in forest areas	3	3
226 Restoring forestry potential and introducing prevention actions	3	3
227 Support for non productive investments	4	6
321 Basic services	1	2
311 Diversification into non-agricultural activities	1	1
312 Support for business creation and development	1	1
313 Encouragement of tourism activities	1	1
Total		76

Causal links reported (the first 10 of the list by axis)

Measure	Causal links encountered	Public goods causally linked
121 Modernisation in agricultural holdings	8	3
125 Infrastructure development and adaptation of agriculture	5	2
123 Adding value to agricultural-forestry products	5	3
114 Use of advisory services by farmers and forest holders	4	4
111 Vocational training and information actions	4	4
214 Agri-environment payments	7	4
226 Restoring forestry potential and introducing prevention actions	6	4
221 First afforestation of agricultural land	6	4
213 Natura 2000 payments	6	3
216 Support for non productive investments	4	3
212 Payments to farmers in areas with handicaps, other than mountain areas	4	3



Measures and indicators

52 evaluation documents consulted

Measure	Number of indicators used	Types of indicators used
Climate change	81	CMEF impact indicator variations, additional
Biodiversity – wildlife	95	CMEF impact indicator variations, output indicators combined with survey findings and judgements derived from literature reviews
Biodiversity HNV	42	CMEF impact but mainly qualitative methods (beneficiaries surveys, expert interviews, literature reviews) baseline, output and result indicators
Water quality	95	CMEF impact, baseline, result and output + additional indicators (Quantitative, qualitative and mixed assessments)



Validation through context indicators

- Biodiversity – wildlife ([Farm Bird Index availability](#))
- Biodiversity – HNV ([Grassland conservation](#))

ENVIEVAL					
NUTS code	Label	NUTS level	RD program	Index (2000=100)	Flag
EU-27	European Union (27 Member States)	EU		n.a.	
BE	Belgium	Country		90,8	
BG	Bulgaria	Country	BG - National	n.a.	
CZ	Czech Republic	Country	CZ - National	97,3	
DK	Denmark	Country	DK - National	79,2	
DE	Germany	Country		75,7	
EE	Estonia	Country	EE - National	105,5	2006
IE	Ireland	Country	IE - National	92,4	
EL	Greece	Country	EL - National	n.a.	
ES	Spain	Country		84,2	
FR	France	Country		96,2	
IT	Italy	Country		104,6	2007
CY	Cyprus	Country	CY - National	n.a.	
LV	Latvia	Country	LV - National	115,2	
LT	Lithuania	Country	LT - National	n.a.	
LU	Luxembourg	Country	LU - National	n.a.	

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ENVIEVAL					
<h2>Good practices</h2> <p>Austria</p> <ul style="list-style-type: none"> •application of multivariate logistic regressions, •to analyse the causal relationships between the AE submeasures and the spatial distribution of bird species of the FBI, •including also climate, land cover, topography, marginal strips and land use. •Forty bird species were analysed and differentiated according to the main agricultural land use types. •Only generic conclusions can be drawn about the impacts of AEMs on the FBI. 					
Alexandra Smyrniotopoulou- George Vlahos				Rome, 4th of July 2013	

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Very preliminary conclusions

- Things are evolving
(1998, 2000-2006, 2007-2013, 2014-2020)
- Lack of consistent data.
- Surveys, (usually to land users), specific case studies, (very expensive).
- Small reliance on existing data sets (administrative, bureaucratic barriers).
- CMEF common indicators interpreted and used but in different ways.
- Surrogate indicators used not that SMART.

..to do next

- More qualitative in-depth analysis,
 - identify strengths/weaknesses
 - data gaps, impediments for use.
- Consult with stakeholders/ validate.
- Derive recommendations for candidate indicators
 - Assessment methods (causal chains).
- Formulate proposals to overtake obstacles.