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## Article

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# Assessing local action groups and auctions as institutional alternatives for designing and implementing agri-environmental measures in the EU – results from an expert survey

## Die Beurteilung von lokalen Aktionsgruppen und Ausschreibungen als institutionelle Alternativen zur Gestaltung und Implementierung von Agrarumweltmaßnahmen in der EU – Ergebnisse einer Expertenbefragung

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### Abstract

The new European Council Regulation on support for rural development (EC) No. 1698/2005 has opened up the opportunity for two important innovations for the design and implementation of agri-environmental measures: local action groups (LAG) according to the LEADER approach and calls for tender. The article firstly reviews the political and scientific debate on the possible performance of these innovations and, secondly, analyses how agents in public administrations, private associations and research institutes assess them. This ex-ante evaluation is based on 279 interviews in nine EU member states, carried out in the context of an EU-research project in the Sixth Framework Programme in 2006. The results show that (1) the performance of LAG is generally rated higher than that of auctions, (2) different actors show similar evaluation patterns, thus forming advocacy coalitions, and (3) experiences and learning may play an important role in the actors' evaluation of both innovations.

### Keywords

European agri-environmental policy; decentralisation; local action groups; auctions; European Rural Development Policy; European Agricultural Policy

### Zusammenfassung

Die neue Ratsverordnung zur ländlichen Entwicklung (EG) Nr. 1698/2005 eröffnet zwei neue Möglichkeiten der Gestaltung und Implementierung von Agrarumweltmaßnahmen: lokale Aktionsgruppen (LAG) im Sinne des LEADER-Ansatzes und Ausschreibungen. Der Beitrag fasst zunächst die politische und wissenschaftliche Diskussion zur Leistungsfähigkeit dieser Innovationen zusammen, um im zweiten Schritt zu analysieren, wie relevante Akteure aus der öffentlichen Verwaltung, den privatwirtschaftlichen Verbänden und aus Forschungseinrichtungen diese bewerten. Diese Ex-ante-Bewertung basiert auf 279 Interviews in neun EU-Mitgliedsstaaten, die im Verlauf eines EU-Forschungsprojektes innerhalb des 6. Forschungsrahmenprogramms 2006 durchgeführt wurden. Die Ergebnisse zeigen, dass (1) die Leistungen von LAG grundsätzlich besser evaluiert werden als die von Ausschreibungen, (2) verschiedene Akteure ähnliche Muster der Evaluierung aufweisen und damit Befürwortungskonstellationen bilden, (3) Erfahrungen und Lernprozesse eine wichtige Rolle bei Evaluierung durch die Akteure spielen können.

### Schlüsselwörter

Europäische Agrar-Umweltpolitik; Dezentralisierung; lokale Aktionsgruppen; Ausschreibungen; Europäische ländliche Entwicklungspolitik; Europäische Agrarpolitik

### 1. Introduction

In September 2005, the Regulation (EC) No. 1698/2005 on support for rural development was agreed by the Council of the European Union.<sup>1</sup> For the programme period 2007-2013, this regulation is the basis of the so called second pillar of the Common Agricultural Policy (CAP) which focuses on three commonly agreed core policy objectives named axes. The first axis targets improvements to the competitiveness of agriculture and forestry, the second support for land management and environmental improvements and the third improvements to quality of life and encouragement of economic diversification. Agri-environmental measures (AEM) are part of the second axis.

AEM were introduced into European policy in 1992 as part of the Mac Sharry reform of the CAP. They remunerate farmers for activities which go beyond the usual good farming practices. Following the principle of subsidiarity, however, it has been up to the member states to decide the detail as to the design and implementation of AEM. This has resulted in a large diversity of measures throughout the EU. Decisions on AEM, nevertheless, have been made by the member states in a rather centralised way – either at the national or regional policy level – and implemented predominantly following the standard-price approach, i.e. paying a fixed compensation rate for compliance with certain predefined production standards. The new regulation contains two important innovations which will be analysed within this paper: first, the three thematic axes are comple-

<sup>1</sup> Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

mented by a fourth methodological axis dedicated to the LEADER approach. As at least 5% of the funds has to be allocated to the LEADER axis, this allows member states to design a part of the AEM via local action groups (LAG) defined in Article 61 of the regulation (EUROPEAN COMMISSION, 2005). Secondly, in particular for AEM, the new regulation introduces auctions as an additional option for contracting with farmers. Article 39 (4) says: "Where appropriate, the beneficiaries may be selected on the basis of calls for tender, applying criteria of economic and environmental efficiency" (EUROPEAN COMMISSION, 2005).

Since their introduction, AEM have been criticised for their lack of environmental effectiveness and economic efficiency and different scholars have argued that, amongst others, decentralisation of decision making and the use of auction mechanisms may enhance AEM performance (e.g. LATACZ-LOHMANN and VAN DER HAMSVORST, 1997; HAGEDORN, 2001). However, both the local design of AEM and the use of auctions have remained rare exceptions in policy practice. We shall, first, briefly review the ongoing political and scientific discussion regarding the effectiveness and efficiency of LAG and auctions as well as possible reasons why member states have made little use of them. Secondly, we shall present the results of a unique expert survey with relevant actors involved in the design and implementation process of AEM. The empirical data presented are based on the EU research project "Integrated Tools to Design and Implement Agro-Environmental Schemes" (ITAES), which is a specific targeted research project of the Sixth Framework Programme launched by the European Commission in 2003. In this project, in 2006, quantitative and qualitative data were collected in ten case study areas over nine EU countries. Amongst others, an expert survey has been conducted with 279 actors from public administrations, private associations and research institutes. Based on standardised and open questions we investigate how these actors assess the innovative parts of the regulation in terms of performance. In doing so, we follow a cognitive-evolutionary political economy approach to policy-making, acknowledging that it is not merely the "objective" reality that matters for political decision making, but rather the cognitive structures of different actors, i.e. their preferences and beliefs about circumstances, restrictions, processes and outcomes (see e.g. SABATIER, 1988; SLEMBECK, 1997; SCHARPF, 1997: 51-68). In particular, we examine the hypotheses that the perceptions of actors are systematically affected by the actor's position, the interaction with other actors and the experiences gained. Consequently, we analyse which factors influence evaluation of the different political innovations. In addition, we point out the main obstacles actors perceive with regard to the implementation of these bottom-up approaches for designing AEM. The results show that (1) the performance of LAG is generally better evaluated than that of auctions, (2) different actors show similar evaluation patterns, thus forming advocacy coalitions, and (3) experiences and learning may play an important role in the actors' evaluation of both innovations.

The paper is organised as follows: chapter two starts by summarising the scientific and political discussion on local action groups, including environmental co-operatives, and auctions in the context of AEM, bearing in mind the de-

tailed options for such innovative approaches offered in the new regulation. Chapter three briefly describes the theoretical basis, the methodology and the sample of countries and actors. The actors' assessment of LAG and auctions are analysed and discussed in chapter four. We sum up with some conclusions and recommendations for policy makers.

## 2. Scientific and political discussion on bottom-up approaches for agri-environmental measures

The AEM have been criticised in recent years for several reasons. According to the EUROPEAN COURT OF AUDITORS (2005), neither the objectives nor the impact of the measures are clear and transparent. Several authors argue that the lack of effectiveness results from the fact that the present AEM give insufficient consideration to local production potential and environmental conditions, local people's interest and their specific issues (BULLER, 2000; LOWE and BALDOCK, 2000). With regard to compensation for the cost of carrying out AEM, in several cases unspecific measures and payments cause overcompensation for farmers in marginal areas, where the uptake of AEM is comparatively high. On the other hand, in areas with high production potential due to high soil quality, the extensification payments usually do not fully compensate the economic loss due to comparatively high opportunity costs (OSTERBURG, 2002). Summarising several evaluations which have been done, the environmental effectiveness as well as the cost-effectiveness of AEM within the former Regulation (EEC) No. 2078/1992 and the Regulation (EC) No. 1257/1999 vary widely and are very often unsatisfactory (MARGGRAF, 2003). As this was not in line with the original objectives of the Regulations, the European Commission argued that most member states simply did not fully exploit the scope and opportunities offered by the EU (FISCHLER, 2000).

### 2.1 Prospects for local action groups

In the new Council Regulation (EC) No. 1698/2005 on support for rural development at least 5% of the budget, distributed on the three axes mentioned above, has to be spent on bottom-up approaches via local action groups (LAG). The LAG shall satisfy the following conditions: (a) they must propose an integrated local development strategy ...; (b) they must consist of either a group already qualified for the Leader II or Leader+ initiatives, ... or, according to the Leader approach, be a new group representing partners from the various locally based socioeconomic sectors in the territory concerned. At the decision making level, the economic and social partners, as well as other representatives of the civil society, such as farmers, rural women, young people and their associations, must make up at least 50% of the local partnership; (c) they must show an ability to define and implement a development strategy for the area. Furthermore "the Managing Authority shall ensure that the local action groups either select an administrative and financial leading actor able to administer public funds and ensure the satisfactory operation of the partnership, or come together in a legally constituted common structure, the constitution of which guarantees the satisfactory operation of the partnership and the ability to administer public funds". (EUROPEAN COMMISSION, 2005, article 62)

To meet these requirements, local action groups might integrate more objectives than only the design of AEM. But with too many objectives, these groups run the risk of becoming too big. To solve the problem of the “too big groups” in article 62 (4) of the above mentioned regulation, it is said that local action groups may select cooperation projects. An agri-environmental forum or an environmental cooperative could be part of a local action group with several specific subgroups. A well functioning co-operation should demonstrate members’ commitment to specific goals, their willingness to endorse or transform existing routines and their responsiveness to incentives deliberately designed to maintain or improve their participation (MÉNARD, 1995). SLANGEN and POLMAN (2002) underline, in particular, the relevance of reliable obligations and the stability of cooperative arrangements within the environmental sphere. In the Netherlands, environmental cooperatives for farmers are already widespread. The main ranges of activity of these environmental cooperatives lie in landscape conservation and in contractual nature protection, in environmental counselling for members and in the protection of their interests (SLANGEN, 1997). The members of the cooperatives maintain their private property rights and mainly remain independent farmers (SLANGEN, 2001). Further conceptual thoughts on the design of environmental cooperatives are developed by HAGEDORN (2000) and HAGEDORN et al. (2002). That local action groups can serve as an adequate solution for agri-environmental problems is shown by HAGEDORN (2001), ARZT et al. (2003) and EGGERS et al. (2004). From a different perspective the authors describe the implementation and working experiences with an Agri-Environmental Forum in Brandenburg. The core argument of the authors is that more problem-related measures with higher environmental effects could be designed. With the same amount of money spent on AEM higher environmental effects could be achieved. KNICKEL et al. (2006) describes the results of a comparative analysis of a sample of agriculture-environment projects from the Regional Action Programme in Germany.

Nevertheless, up to now bottom-up approaches have been exceptions during the last programme period. AHRENS et al. (2000) assumed an unwillingness of regional politicians to demand considerable efforts from farmers to fulfil the objectives of the AEM. Research done in the field of political economy supports the view that agricultural lobbies maintain a strong influence on the design of agricultural policies in general and on AEM in particular (HAGEDORN, 1993; EGGERS, 2005, 2006). A differentiated analysis of the role of the regional administration has been carried out by EGGERS et al. (2004) in the case of the federal state of Brandenburg. The authors concluded that “since decentral approaches beyond the *Laender* level are not explicitly provided by the relevant EU regulations, there is no necessity for federal (or *Laender*) governments to support or implement any kind of local organisations, such as the Agri-Environmental Forum. On the contrary, the tight room for manoeuvre within the current Rural Development Regulation rather increases risks, workload and costs for the regional administration when trying to implement such local participatory approaches” (EGGERS et al., 2004: 27). EGGERS (2005) analysed several obstacles for implementing bottom-up approaches for AEM on the different administrative and institutional levels. According to this work, one

reason is a lack of expert knowledge and time resources (both appear interrelated) within the administration on all political levels. In some cases further cutbacks to regional administration might prevent the implementation of bottom-up approaches which demand a certain level of knowledge. But also society is not sensitised for agri-environmental issues. This leads to a reduced commitment by environmental associations owing to a lack of member support for those activities. Another important issue is the risk aversion approach taken by bureaucrats, stated by NISKANEN (1968) in his theory of bureaucracy. This couldn’t be disproved but may be explained by the absence of incentives for innovative approaches (EGGERS, 2005: 247). A core argument seems to be power and path dependency: those actors who are in charge of the design of AEM at the moment, have neither interest nor any relevant incentives for changing the current institutional arrangements (EGGERS, 2005: 225ff.).

## 2.2 Prospects for auctions

As mentioned already in the introduction, specifically for AEM, the new regulation allows a type of auction or tender process, applying criteria of economic and environmental efficiency (EUROPEAN COMMISSION, 2005, article 39 (4)). Several countries are already applying auction mechanisms in order to guarantee natural resource management, for instance the Conservation Reserve Program (CRP) in the United States and the Conservation Stewardship Scheme in the United Kingdom. In Australia, the Bush Tender Trial is a well-known example of auctioning biodiversity contracts (STONEHAM et al., 2002).

HOLM-MÜLLER et al. (2002: 119) highlight that auctions may be an adequate instrument for some AEM but not for others. They conclude that extensification programmes offer the best conditions for successful auctions, whereas it seems counterproductive to use auctions for choosing between different areas in environmental contracting.

A research group from the Georg August University of Göttingen designed an outcome-based payment scheme to reward ecological services in agriculture on the basis of auctions. In addition, the project considers the interests of local people and relevant stakeholders and their demand for botanical diversity. The authors conclude from their first experiences that such a payment scheme could already be practicable in a model region (GROTH, 2005). LATACZ-LOHMANN and VAN DER HAMSVORST (1997) argue that competitive bidding, compared to fixed-rate payments, could increase the cost-effectiveness of conservation contracting significantly. But the authors also mentioned the problem of strategic bidding behaviour in sequential auctions. HAILU and SCHILIZZI (2004: 149) concluded on the basis of an agent-based computational experiment that the economic advantages of auctions might not survive over time, as bidders learn to extract information rent. In the long term, auction outcomes would be less attractive in comparison to fixed price schemes.

CASON and GANGADHARAN (2004) conducted two laboratory experiments to investigate alternative auction mechanisms that could be useful for conservation and natural resource management. The first experiment was designed to analyse the relationship between an auction’s information structure and landowners’ incentives to reveal their costs

(CASON and GANGADHARAN, 2004). The second experiment aimed at comparing discriminative price auctions with uniform price auctions with regard to their influence on landowners' profits and environmental benefits (CASON and GANGADHARAN, 2004). Results from the experiments indicated that the design of auctions has a strong impact on seller's behaviour on the one hand and on market performance on the other. There is a strong indication that revealing the environmental benefits associated with land management options could cause a reduced market performance: landowners might raise their price offers with the effect that fewer projects can be realised within a fixed budget. Limited information thus appears to reduce strategic behaviour by participants. The examination of the pricing rule brought to light a slightly better performance of the discriminative price auction in comparison to the uniform price auction.<sup>2</sup>

Summarising this discussion, auctions are considered to be rather critical in the long term whereas local action groups appear to maintain a serious potential to improve AEM, provided that they do not become too big and that their members can identify themselves with the group. In the next section, the methodology used in this research will be explained together with a discussion of the main theoretical principles upon which it is founded.

### 3. Methodology

Among others, the ITAES project aimed at assessing decision-making and implementation procedures of AEM from the viewpoint of different actors within public administrations, private associations, and research bodies (see EGGERS et al., 2007). As such the empirical research followed a cognitive-evolutionary, political economy approach to policy-making, acknowledging that it is not merely the "objective" reality that matters for political decision making but rather the cognitive structures of different actors, i.e. the preferences and beliefs about circumstances, restrictions, processes and outcomes (see e.g. SABATIER, 1988; SLEMBECK, 1997; SCHARPF, 1997: 51-68). In this line of reasoning it is assumed that the individual actor's abilities to perceive and process information are always limited and biased, since the existing cognitive structures may lead to selective perceptions and biased interpretation of information. However, preferences and beliefs are not assumed to be constant, but shaped and changed by the economic, political and social interactions between actors, by new information and new experiences (SLEMBECK, 1997). Within the policy process, collective preferences and beliefs are formed. Amongst others, different advocacy coalitions may emerge within groups of actors

that share similar preferences and beliefs and support or oppose certain policy issues (SABATIER, 1987, 1988). These coalitions may differ from policy issue to policy issue. For instance, for certain policy issues the coalition may be formed by the agricultural camp, i.e. agricultural administrations and associations; on other issues the coalition may be formed within the public administration sector, e.g. the agricultural and environmental administration. From this perspective, research institutes are also part of the policy process with their own cognitive structures. However, they systematically discover and communicate new scientific information and may shape significantly the preferences and beliefs of other actors.

In order to capture the preferences and beliefs of different actors involved in the policy process for designing and implementing AEM, an expert survey was conducted in 2006 in ten case study areas over nine EU countries, shown in table 1. In a standardised questionnaire with five-point Likert scale variables, actors were asked for their perceptions and preferences as representatives of their organisations. The questionnaire with six main parts also included open questions and room for additional comments and the responses have been borne in mind in the discussion in chapter 4. In most countries, members of the respective ITAES teams conducted face to face interviews supplemented by some telephone interviews. In Finland, in addition to the face to face interviews, a web based survey was carried out as the actors involved were already used to this methodology. All interviewers received a detailed definition of the expressions used. These definitions were part of the questionnaire. The data analysis includes descriptive analysis as well as ordered logit regressions.

**Table 1. Number of respondents per type of organisation by country**

Region/Type	AgAd	EnAd	FaAs	EnAs	Res	Other	Total
Flanders (BE)	7	11	3	4	2	3	30
Czech Republic (CZ)	12	8	5	5	3	3	36
Finland (FI)	22	6	14	3	2	0	47
Basse-Normandie (FR)	18	8	10	1	3	1	41
Brandenburg (DE)	7	10	4	5	5	7	38
Ireland (IE)	1	0	1	2	3	2	9
Veneto & Emilia Romag (IT)	8	3	9	2	5	3	30
Friesland (NL)	4	2	2	2	7	2	19
North England (UK)	6	7	2	9	2	3	29
Total	85	55	50	33	32	24	279

Legend: AgAd: Agricultural Administration    EnAd: Environmental Administration  
 FaAs: Farmer Association    EnAs: Environmental Association  
 Res: Research

Source: ITAES Expert Survey, own calculation

A very important and crucial point has been the selection of experts. The intention was to include all actor groups who are, or should be, directly or indirectly involved in the design and implementation of AEM. This means not only the administration and agricultural and environmental associations, but also researchers and members of consumer, hunting and tourism organisations. It proved somewhat difficult to find people in the latter organizations with sufficient knowledge on the subject and who were willing to cooperate on all relevant administrative levels. The objective was to interview not only actors from the administration on all administrative levels but also those from non governmental

<sup>2</sup> In a uniform-price auction, the seller raises the price successively until the number of remaining bidders matches the number of items on offer. Each of the bidders wins and pays the same price. In a discriminative price auction bidding takes place as long as a bid is no longer topped.

organisations. To maintain the explanatory power of the results, all actors had the opportunity to answer “I don’t know” where they perceived themselves to be lacking in specific knowledge. In table 1 it is shown that in general the agricultural administration is represented most in the sample, followed by the environmental administration and farmers associations. Environmental associations and researchers are represented to a smaller extent. Because the purpose of the research was to interview all actors from all administrative levels who are or could be involved in the design of AEM, representatives from hunting, tourism, consumer or any other associations were also questioned. However, the number of respondents in these groups is too small to conduct reliable statistical tests. Therefore, all groups with less than ten members are summarised in a group ‘Others’.

Although it was the original plan to have a similar distribution of respondents over the different categories in all countries, in practical terms this proved impossible. However, the result broadly reflects the structure of relevant and interested actors in the field of AEM in each country. Nevertheless, some critical comment is necessary in interpreting the results for two of the countries: First, the Netherlands’ sample is dominated by researchers, and second Ireland presents with only nine interviews – a rather small number for statistical calculations. It was nevertheless decided to keep those countries in the sample because they do provide some useful information.

In the following discourse we shall present and analyse the different actors’ assessment of the possible outcomes of LAG and auctions compared to the status quo. Since the data represent stated perceptions on expected outcomes they also reflect the cognitive structures of actors, i.e. their beliefs as well as their preferences. In particular, we examine the hypotheses that the perceptions of actors are systematically affected by the actor’s position, their interaction with other actors and the experiences gained. In addition, we may be able to identify certain advocacy coalitions, i.e. a number of actors sharing basic beliefs and preferences and either supporting or opposing the institutional innovations.

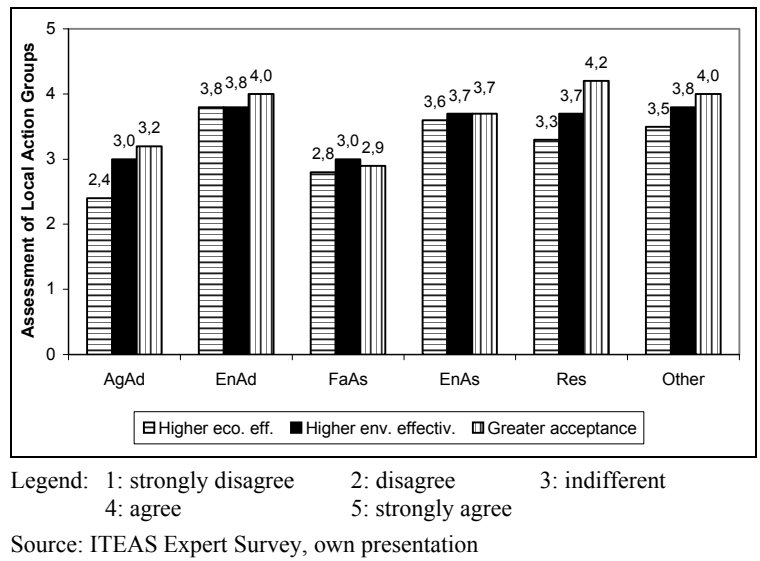
## 4. Local action groups and auctions as institutional innovations

### 4.1 Assessing local action groups

Generally, in the ITAES project a strong demand for decentralisation was identified (see EGGERS et al., 2007). Therefore, we wanted to ascertain whether local action groups could be a valuable institutional alternative to the current system. The question was formulated as follows: “Local action groups, as mentioned in the new Council Regulation (EC) No. 1698/2005, could lead to a) a higher economic efficiency of AEM; b) a higher environmental effectiveness and c) a greater acceptance of AEM”. Actors could answer on a scale from 1 (strongly disagree) to 5 (strongly agree) or they could answer with “no opinion”. For this question 85% of the actors had an opinion.

Figure 1 shows that two main groups exist with regard to assessment of LAG’s potential. Actors from the environmen-

**Figure 1. Assessment of local actions groups by actor groups**



tal administration and associations as well as researchers and the group “others”<sup>3</sup> see a high potential in LAG. Contrary to these groups, actors from the agricultural administration and farmer associations tend to be indifferent, or disagree, that LAG increase economic efficiency, environmental effectiveness and acceptance. On average, actors are indifferent with regard to the higher economic efficiency of local action groups (3.0). There is a slightly higher level of agreement with the statements that LAG result in a higher environmental efficiency (3.4) and a higher acceptance of AEM (3.5).

To assess which factors influence the opinion of the respondents on LAG, ordered logistic regression models have been used, as depicted in table 2. For LAG, the level of influence of different administrative levels, countries and actor groups was assessed. Similarly the influence of respondents’ opinions on the heterogeneity of the natural environment was also investigated. The latter variable is included because it is argued in the literature that LAG and auctions are particularly beneficial if the natural environment is heterogeneous. All variables in the models are dummies derived from categorical variables, except for opinion on the heterogeneity of the natural environment which is an ordinal variable. The consequence of using categorical variables, transformed into dummy variables, is that one can only assess the influence of a category by comparing it to a reference category.

Table 2 shows that the administrative level only influences the assessment of the first statement: compared to the national level (NUTS0) as reference category, respondents from the Local Area Unit level (LAU level) agree more that LAG lead to a higher economic efficiency of AEM.<sup>4</sup> The assessment of all three statements is significantly influenced by the country: compared to the Czech Republic as

<sup>3</sup> The category ‘others’ groups representatives from consumer organisations, hunting associations, tourism associations and LEADER groups.

<sup>4</sup> If for a certain variable, the p-value belonging to the z test statistic is lower than 0.05, we assume that the coefficient in the model belonging to that variable is significantly different from zero.

**Table 2. Ordered logistic regression models for local action groups**

Variables	Higher economic efficiency of AEM		Higher ecological effectiveness of AEM		Greater acceptance of AEM	
	Coefficient	p for z test statistic	Coefficient	p for z test statistic	Coefficient	p for z test statistic
NUTS1	0.114	0.833	-0.306	0.573	-0.128	0.819
NUTS2	0.339	0.531	-0.007	0.989	-0.491	0.372
NUTS3	0.142	0.771	-0.210	0.668	0.3089	0.545
LAU	1.190*	0.056	0.817	0.183	0.273	0.654
BE	1.918***	0.002	1.861***	0.003	1.411**	0.026
IE	0.515	0.568	1.223	0.184	1.727*	0.067
FR	1.602 ***	0.003	2.814***	0.000	2.497***	0.000
DE	0.274	0.663	0.325	0.611	0.127	0.844
UK	0.033	0.961	0.708	0.284	0.283	0.681
IT	0.400	0.501	-0.145	0.816	0.767	0.228
NL	2.243***	0.000	2.522***	0.000	2.146***	0.000
FI	-0.718	0.234	-0.404	0.505	-0.961	0.119
Agr. Adm.	-1.428 ***	0.001	-1.285***	0.002	-1.512***	0.000
Env. Adm.	0.519	0.236	-0.189	0.671	-0.333	0.438
Agr. Assoc.	-0.765*	0.082	-1.191***	0.008	-1.915***	0.000
Env. Assoc.	0.353	0.491	-0.213	0.671	-0.906*	0.073
Heterogeneity natural environment	-0.061	0.635	0.130	0.329	0.194	0.144
Nr. Obs.	221		231		237	
LR Chi <sup>2</sup>	103.730		109.380		107.680	
Prob. > Chi <sup>2</sup>	0.000		0.000		0.000	
Pseudo R <sup>2</sup>	0.149		0.153		0.149	

Legend: \*\*\*: significant at the 0.01 level      \*\*: significant at the 0.05 level      \*: significant at the 0.1 level

Source: ITEAS Expert Survey, own calculation

reference country, LAG are more positively evaluated in Flanders, Basse-Normandie and Fryslân concerning economic efficiency, ecological effectiveness and acceptance.<sup>5</sup> There is no significant difference in assessment between the Czech Republic and the other countries, although in the last model Ireland also agrees considerably more that LAG result in a greater acceptance of AEM. Regarding the influence of the actor groups, the models show that, compared to the reference category consisting of researchers and others, the agricultural administration and agricultural associations significantly assess LAG more negatively concerning economic efficiency, ecological effectiveness and acceptance of AEM.

Although not significant on the 0.05 level, environmental associations also evaluate the influence of LAG on acceptance of AEM more negatively than researchers. We hypothesized that LAG would be evaluated more positively when the natural environment is perceived to be more heterogeneous. However, the models do not show a significant influence of this variable on the assessment of all three statements. For the three models, the MacFadden's Pseudo R<sup>2</sup> indicates that the models can only explain the variance in the dependent variables to a limited extent<sup>6</sup>.

<sup>5</sup> The dummy variables are depicted in the model with the official country code, although for most countries they only represent a region. BE therefore is Flanders, IE Ireland, FR Basse-Normandie, DE Brandenburg, UK North England, IT Emilia Romagna and Veneto, NL Fryslân and FI is Finland.

<sup>6</sup> If the p-value belonging to the Likelihood Ratio Chi<sup>2</sup> test statistic is lower than 0.05, which is the case for the three models, it means that at least one of the regression coefficients in the model is not equal to zero.

In the survey, the respondents had the opportunity to comment more expansively on the issue of LAG in an open question. Summarising this qualitative information, in general there seems to be a positive attitude towards organising AEM through LAG. Although LAG are expected to be more costly, because they are administratively more intensive, they lead to higher benefits because they have a higher level of knowledge with regard to the local situation. In Belgium, the respondents call for more pilot projects and an increased involvement of regional farm planners in LAG.

## 4.2 Assessing auctions

On average, calls for tender or auctions tended not to be considered as an institutional alternative for AEM among the respondents. This may be influenced by the fact that auctions are less well known in comparison to LAG. Only 75% of the respondents had an opinion on auctions (85% for LAG). On a scale from 1 (strongly disagree) to 5 (strongly agree) actors don't agree that auctions lead to less transaction costs (2.4). They are indifferent concerning the second and the third statement, which states that auctions lead to a greater acceptance (2.7) and higher environmental effectiveness (2.6). When comparing the evaluation of auctions by actor groups we notice a similar pattern as we have seen for LAG, only on a lower level. The agricultural domain assesses auctions to be rather critical, whereas the other actor groups tend to be indifferent. The same explaining variables as for LAG have been used in three models on the opinion of respondents regarding the above mentioned statements for auctions. Table 3 shows that the administrative level has an influence on the assessment of the first and the third statement. Compared to the national level as reference category, the NUTS 2 level agrees significantly more

that auctions result in savings in transaction costs and the LAU level agrees more that auctions result in a greater acceptance of AEM. The influence of the country is different for the three statements. Compared to the reference country Czech Republic, Basse-Normandie and to a lesser extent Fryslân agree more that auctions lead to savings in transaction costs in the implementation of AEM. Finland agrees considerably less than the reference country, Czech Republic, that auctions lead to higher environmental outcomes of AEM. Flanders, and to a lesser extent Fryslân, agree more than the reference country that auctions lead to a greater acceptance of AEM. The influence of the actor groups is the same as for LAG: the agricultural domain – administration and associations – assess auctions significantly more negatively than the reference group of researchers concerning economic efficiency, ecological effectiveness and acceptance. Again, despite our hypothesis that a greater heterogeneity of the natural environment results in a more positive opinion on bottom-up approaches, according to the models in table 3 the assessment of auctions is not influenced significantly by this variable. The MacFadden's Pseudo  $R^2$  indicates again that the models can only explain the variance in the dependent variables to a limited extent.

Regarding the qualitative information on auctions, obtained from the open questions in the survey, the general assessment is not especially positive, as with LAG. Respondents from the Czech Republic are generally positive about auctions, but believe the approach is better suited to large farms and that it can increase the chance of corruption. In Brandenburg, the larger input of farmers in a call for tender approach is valued, but there is also the fear that farmers lack sufficient knowledge. Respondents from Brandenburg

and from Emilia Romagna, Italy, fear that in the long term, auctions will prove to be administratively time-consuming and thus too costly. Respondents from Flanders praise the better adaptation to local conditions following from the call for tender approach. In Basse-Normandie, respondents fear that this approach will lead to inequitable treatment of farmers, and that there will be too large an emphasis on financial issues instead of environmental ones. On average, calls for tender or auctions as an institutional alternative for AEM tended not to be considered among the respondents as leading to less transaction costs, greater acceptance and higher environmental effectiveness. The disagreement to the latter was, however, less marked compared to the transaction costs reduction. In comparison to LAG, actors are much more sceptical concerning the implementation of auctions.

### 4.3 The main obstacles in designing specific AEM in a bottom-up approach

In section 4.1 LAG are considered as a promising institutional alternative. In this section the main obstacles and problems in designing successful specific AEM in a bottom-up approach are briefly discussed. The experts were asked to indicate their attitudes towards different items on a scale from 1 (strongly disagree) to 5 (strongly agree). From these items actors assessed the new Council Regulation (EC) No 1698/2005 with 2.2, the corresponding Commission Regulation (implementation Regulation) with 2.7, the general administrative structure in their countries with 3.4, the EU budget available for the second pillar of the CAP with 3.7 and the risk aversion approach of the responsible civil servants (administrators) with 3.6. This means that the EU budget is considered as the greatest obstacle, followed

**Table 3. Ordered logistic regression models for auctions**

Variables	Savings in transactions costs at the implementation of AEM		Higher environmental outcomes of AEM		Greater acceptance of AEM	
	Coefficient	p for z test statistic	Coefficient	p for z test statistic	Coefficient	p for z test statistic
NUTS1	-0.027	0.961	-0.118	0.839	0.177	0.748
NUTS2	1.370**	0.016	-0.568	0.291	0.347	0.568
NUTS3	0.455	0.350	-0.324	0.522	0.763	0.137
LAU	0.812	0.188	-0.573	0.357	1.229**	0.043
BE	0.880	0.145	0.565	0.353	2.166***	0.001
IE	-1.242	0.224	1.018	0.363	1.129	0.287
FR	1.116**	0.042	-0.449	0.399	-0.321	0.557
DE	-1.074	0.118	0.089	0.896	0.744	0.279
UK	1.103*	0.098	0.304	0.660	0.859	0.195
IT	-0.081	0.899	-0.064	0.918	0.483	0.482
NL	1.064*	0.086	0.002	0.997	1.104*	0.061
FI	-0.361	0.554	-1.186*	0.055	-0.492	0.431
Agr. Adm.	-1.382***	0.001	-1.134***	0.006	-1.207***	0.004
Env. Adm.	-0.851*	0.071	0.100	0.819	-0.693	0.113
Agr. Assoc.	-1.229**	0.010	-1.049**	0.021	-1.287***	0.006
Env. Assoc.	-0.792	0.200	-0.165	0.773	-0.680	0.220
Heterogeneity natural environment	0.216	0.128	0.056	0.696	0.220	0.120
Nr. Obs.	200		207		201	
LR Chi <sup>2</sup>	52.660		52.52		54.77	
Prob. > Chi <sup>2</sup>	0.000		0.000		0.000	
Pseudo R <sup>2</sup>	0.085		0.082		0.088	

Legend: \*\*\*: significant at the 0.01 level      \*\*: significant at the 0.05 level      \*: significant at the 0.1 level

Source: ITAES Expert Survey, own calculation

by the risk aversion approach of the responsible civil servants and the general administrative structure.

The new Council and Commission Regulation are not seen as an obstacle to implement a bottom-up approach. This is a change in comparison to the forerunner Commission Regulation which was assessed as an obstacle by several actors (EGGERS, 2005: 217). But it has to be pointed out that the majority of the respondents did not comment on the new regulations, as its details are not well known by some actors inside and most actors outside of the administration. When ranking the agreement on obstacles to bottom-up approaches according to actor groups, the high agreement of researchers that risk aversion is a major obstacle stands out. All other actor groups consider risk aversion to be an obstacle to a lesser and comparatively similar extent.

In an open question, the respondents were asked to sum up the most important obstacles for a bottom-up approach. Obstacles that are mentioned in every country in the research are the unwillingness to cooperate by the administration due to fears of power loss, a lack of financial means and administrative problems, because the general administrative structure is not adapted to a bottom-up approach. There is also general agreement on the fact that a bottom-up approach will result in a higher administrative load, and that there is a lack of expertise at the local level. Specifically in Brandenburg, higher transaction costs are mentioned. The Czech Republic and Brandenburg mention that control will be more difficult, with a higher risk of corruption. Flanders and Fryslân mention the regulation as an obstacle, because local groups won't be able to fulfil all EU requirements. Flanders also underlines the fact that a bottom-up approach results in such a variety of proposals that it is impossible for the administration to evaluate them all. A respondent in Basse-Normandie claims that there is just too little experience with bottom-up approaches in his country. In the Italian region Veneto the high number of intermediate actors is seen as an obstacle, making the bottom-up approach less cost-effective.

## 5. Conclusions

Summarising the results of the 279 interviews in nine countries, actors assume that measures designed in local action groups (LAG) are not necessarily more efficient than current measures. But actors attribute the potential of a higher ecological effectiveness and higher acceptance to measures that are designed in a LAG. Contrary to LAG the opinion on auctions is comparatively critical. This may be influenced by the fact that auctions are less familiar for most of the actors. However, the results of the survey are broadly consistent with the review of the political and scientific debate which has shown that auctions are considered to be rather critical in the long term whereas local action groups seem to hold a serious potential to improve AEM.

Generally, the assessment of LAG and auctions is very much group specific and certain advocacy coalitions could be identified. Actors from environmental administration and associations as well as researchers and others see a high potential in LAG and are indifferent or even critical with regard to the implementation of auctions. Conversely, actors from the agricultural administration and farmer associations tend to be indifferent or disagree, that LAG in-

crease economic efficiency, environmental effectiveness and acceptance and assess the potential of auctions as negative. Thus, the two innovations find slight support by environmental administrations and associations and researchers, but strong opposition by the agricultural administration and associations. However, LAG and auctions are evaluated more positively by the lower administrative levels and by regions like Flanders, Fryslân and Basse-Normandie. Lower administrative levels may expect a higher level of influence from institutional innovations. The positive attitude of actors in Basse-Normandie and especially in Fryslân can be explained by the fact that they already have more experience with bottom-up approaches (see EGGERS et al., 2007). Nevertheless, for these bottom-up approaches, the budget in particular is seen as a major obstacle, but also the risk averse behaviour of the responsible civil servants and the unsuitable general administrative structure are seen to pose problems.

For most countries it can be concluded that as long as the advocacy coalition of agricultural administration and farmers associations are by far the most influencing groups on the design process of AEM, bottom-up approaches, which are claimed in the new regulation, will remain an exception. Nevertheless, in the future there may be an increasing number of experiences made with LAG and auctions in different European countries providing new information that may lead either to reinforcing or to changing preferences and beliefs of key actors.

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