

# ASSESSING THE EFFICIENCY OF LOCAL ACTION GROUPS AND AUCTIONS FOR DESIGNING AND IMPLEMENTING AGRICULTURAL ENVIRONMENTAL MEASURES IN THE EU - RESULTS FROM AN EXPERT SURVEY

Jörg Eggers<sup>1</sup>, Evy Mettepenningen<sup>2</sup> and Volker Beckmann<sup>1</sup>

<sup>1</sup>Humboldt University of Berlin, Department of Agricultural Economics and Social Sciences, Chair of Resource Economics

<sup>2</sup>Ghent University, Department of Agricultural Economics



*Paper prepared for presentation at the 47<sup>th</sup> annual conference of the GEWISOLA*

*(German Association of Agricultural Economists) and the 17<sup>th</sup> annual conference of the ÖGA (Austrian Association of Agricultural Economists),*

*'Changing Agricultural and Food Sector',*

*Freising/Weihenstephan, Germany, September 26-28, 2007*

*Copyright 2007 by authors. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

## Abstract

In this article the authors focus on two important innovations for agri-environmental measures in the new council regulation: The implementation of local action groups and a call for tenders. The article describes how relevant actors assess the innovations. The results are based on 276 interviews, carried out in 2006 in nine EU Member States. Generally, actors assume that measures designed in local action groups are not necessarily more economically efficient than current measures, but they do have potential to result in a higher ecological effectiveness and in a greater acceptance. However, the opinion on auctions is comparatively critical.

**Keywords:** agri-environmental policy, decentralisation, local action groups, auctions

## 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> 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 at improving the competitiveness of agriculture and forestry, the second at supporting land management and improving the environment and the third at improving the quality of life and encouraging diversification of economic activities.

In this article we concentrate on the agri-environmental measures (AEM) which are part of the second axis. The AEM have been introduced 1992 and remunerate farmers for activities which go beyond the usual Good Farming Practices. The new regulation contains two important innovations which are relevant for the following considerations: First, the three thematic axes are complemented 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 in local action groups defined in Article 61 of the regulation (EUROPEAN COMMISSION 2005). Second, in particular for AEM, the new regulation introduces auctions as an additional option for contracting 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).

Based on the ongoing political and scientific discussion we first ask how relevant actors involved in the design and implementation process of AEM, assess the innovative parts of the regulation. In a next step we analyse which factors are influencing their evaluation. Finally we point out the main obstacles for the implementation of those bottom up approaches for designing AEM. The empirical data presented in this article are based on the EU research project “Integrated Tools to Design and Implement Agro-Environmental Schemes” (ITAES). It 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 have been collected in ten case study areas over nine EU countries.

The paper is organized as follows: Chapter two starts with summarizing the scientific and political discussion on local action groups, including environmental cooperatives, and auctions in the context of AEM, keeping in mind the detailed options for such innovative approaches offered in the new regulation. Chapter three briefly describes the methodology and the sample of countries and actors. The actors’ assessment of LAG and auctions are analyzed and discussed in chapter four. We end up with some conclusions and recommendations for policy makers.

---

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

## **2 Scientific and political discussion on bottom up approaches for Agri-Environmental measures**

The AEM have been criticized during the last years for several reasons. According to the EUROPEAN COURT OF AUDITORS (2005), neither the objectives nor the effects of the measures are clear and transparent. Several authors argue the lack of effectiveness results from the fact that the present AEM neither consider local production potential and environmental conditions, nor local people's interest and their specific problems sufficiently (BULLER 2000; LOWE and BALDOCK 2000). Concerning the compensation of costs for 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, however, 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 unsatisfying (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 scopes 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 approaches in 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, or 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. For a well functioning co-operation it is needed that members involve their 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). POLMAN and SLANGEN (1999) 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 already found a substantial spreading. 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 et al (2000, 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 a higher environmental effects could be achieved. KNICKEL et al (2006) describes the results of a comparative analysis of a sample of agriculture-environment projects of the Regional Action programme in Germany.

Nevertheless, up to now bottom up approaches have been an exception 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) for the case of the federal state 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 increase 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 belong somehow together) within the administration on all political levels. In some cases a further cutback of regional administration might prevent the implementation of bottom up approaches which demand for a certain knowledge. But also the society is not sensitized for agri-environmental issues. This causes a reduced commitment of environmental associations because they might not be supported by its members for those activities. Another important issue is the risk aversion of the bureaucrats, stated by NISKANEN (1968) in his theory of bureaucracy. This couldn't be disproved but somehow explained with the missing incentives for innovative approaches (EGGERS, 2005: 247). A core argument seems to be power and path dependency: Those actors which are in charge for the design of AEM at the moment, have nor any interests neither any relevant incentives for changing the current institutional arrangements (EGGERS 2005: 225 ff).

## **2.2 Prospects for auctions**

As mentioned already in the introduction, in particular for AEM the new regulation allows a kind of auctions or calls for tender, 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, the Conservation Stewardship Scheme and the Nitrate Sensitive Areas Scheme in the United Kingdom. In Australia, the Bush Tender Trial is a well-know example of auctioning biodiversity contracts (STONEHAM et al. 2002).

HOLM-MÜLLER ET AL. (2002, p.119) highlights that auctions may be an adequate instrument for some AEM whereas for others not. HOLM-MÜLLER concludes that extensification programs offer the best conditions for successful auctions whereas it seems counterproductive to use auctions for choosing among 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 the local people and relevant stakeholders and their demand for botanical diversity. The authors conclude from their first experiences that such a payment scheme could be already practicable in a model region (GROTH 2005). LATACZ-LOHMANN and VAN DER HAMSVOORT (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 bases of an agent-based computational experiment that the economic advantages of auctions might not survive over time as bidders learn to extract information rent. On the long run, auctions outcomes would be less attractive in comparison to fixed price schemes.

CASON and GANGADHARAN (2004) conducted two laboratory experiments to investigate alternative auction mechanisms which 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 in regard to their influence on landowners' profits and environmental benefits (CASON and GANGADHARAN 2004). Results from the experiments indicated that the design of auctions shows 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 realized with a fixed budget. Limited information thus appears to reduce strategic behaviour of the 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 rather critical in the long run whereas local action groups seem to hold a serious potential to improve AEM, provided that they don't 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 elaborated together with a discussion of the main theoretical principles on which it is founded.

### **3 Methodology**

In 2006, an expert survey has been conducted in ten case study areas over nine EU countries, shown in Table 1. The survey aimed at assessing decision-making and implementation procedures of AES from the viewpoint of different actors within public administrations, private associations, and research bodies. In a standardized questionnaire with five-point Likert scale variables actors have been asked for their perceptions and preferences. The questionnaire with six main parts included also open questions and room for additional comments which 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. Only in Finland, in addition to the face to face interviews, a web based survey was carried out as actors were already used to this methodology. The data analyses includes descriptive analysis as well as ordered and simple logit regressions.

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 of the pur-

---

<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.

pose to interview all actors from all administrative levels who is 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 summarized in a group ‘Others’.

**Table 1: Number of respondents per type of organization 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**

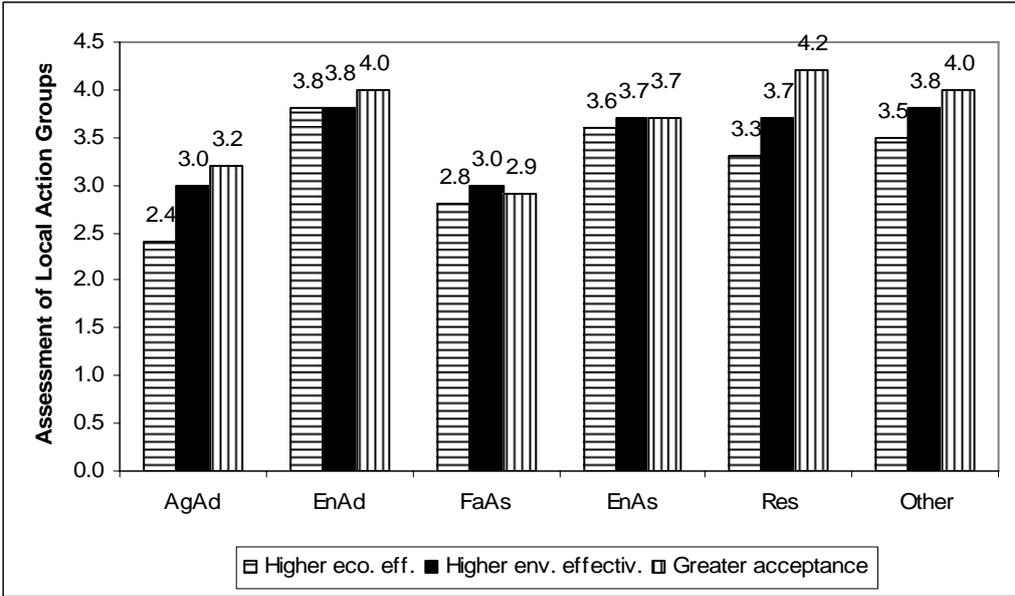
Although it was originally planned to have about the same distribution of respondents over the different categories in all countries, this seemed to be practically impossible. However, the result reflects somehow the structure of relevant and interested actors in the field of AEM in each country. Nevertheless for the interpretation of the results for two countries critical remarks have to be made: 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.

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

##### 4.1 Assessing local action groups

Generally, in our study we noticed a strong demand for decentralisation. First, we wanted to find out whether local action groups could be a valuable institutional alternative to the current system. Therefore a 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 AES; b) a higher environmental effectiveness and c) a greater acceptance of AES”. 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: Assessment of local actions groups by actor groups**



**Legend:** 1: strongly disagree      2: disagree  
 3: indifferent                      4: agree  
 5: strongly agree

**Figure 1** shows that two main groups exist concerning the assessment of the potential of LAG. Actors from the environmental 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 concerning a 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, depicted in Table 2. For LAG, the influence was assessed of the administrative levels, the countries, the actor groups and the opinion on the heterogeneity of the natural environment on the degree to which the respondents agree with the above mentioned statements. The latter variable is included because it is argued in the literature that LAG and auctions are in particular beneficial if the natural environment is heterogeneous. All variables in the models are dummies derived from categorical variables, except for the opinion on the heterogeneity of the natural environment<sup>4</sup> which is an ordinal variable. The consequence of using dummy variables is that one can only assess the influence of a dummy compared to a reference category.

<sup>3</sup> The category ‘others’ groups representatives from consumer organisations, hunting associations, tourism associations and LEADER groups.  
<sup>4</sup> Actors have been asked to what extent they consider the **natural environment** within their region spatially heterogeneous. They could answer from 1 (very homogenous) to 5 (very heterogeneous).

**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 on the 0.01 level      \*\*: significant on the 0.05 level  
\*: not significant with p < 0.1

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>5</sup>. The assessment of all three statements is significantly influenced by the country: compared to the Czech Republic as reference country, LAG are more positively evaluated in Flanders, Basse-Normandie and Fryslân concerning economic efficiency, ecological effectiveness and acceptance<sup>6</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.

However not significant on the 0.05 level, environmental associations evaluate the influence of LAG on acceptance of AEM also more negatively than researchers. Although we hypothesized that LAG would be evaluated more positively when the natural environment is perceived to be more heterogeneous, the models don't 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>7</sup>.

<sup>5</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.

<sup>6</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>7</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 possibility to comment more elaborately on the issue of LAG in an open question. Summarizing this qualitative information, in general there seems to be a positive attitude towards organizing AEM through LAG. Although LAG are expected to be more costly, because they are administratively more intensive, they lead to higher benefits because of a higher knowledge of LAG on 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 tenders 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 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 negative 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<sup>2</sup> indicate again that the models can only explain the variance in the dependent variables to a limited extent.

**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 on the 0.01 level      \*\*: significant on the 0.05 level  
\*: not significant with  $p < 0.1$

Regarding the qualitative information on auctions, obtained from the open questions in the survey, the general assessment is not that 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 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 run, 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 an unequal treatment of farmers, and that there will be a too large emphasis on financial issues instead of environmental ones. On average calls for tenders 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

As local action groups are considered as a promising institutional alternative the main obstacles and problems in designing specific AEM in a bottom-up approach shall be briefly discussed. On a scale from 1 (strongly disagree) to 5 (strongly agree) 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 of the responsible civil servants (administrators) with 3.6. This means that the EU Budget is considered as the greatest obstacle followed by the risk aversion of the responsible civil servants and the general administrative structure.

The new Council and Commission Regulation is 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 ordering the agreement on obstacles of bottom up approaches according to actor groups, the high agreement of researchers that risk aversion is a major obstacle attracts the attention. 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 which are mentioned in every country in the research are the unwillingness to cooperate by the administration because of the fear to lose power, 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 on 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

Summarizing the results of the 276 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 which 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 well known for most of the actors.

Generally, the assessment of LAG and auctions is very much groups specific. Actors from environmental administration and association as well as researchers and other see a high potential in LAG and are indifferent to critical concerning the implementation of auctions. Conversely, actors from the agricultural administration and farmer associations tend to be indifferent or disagree, that LAG increase economic efficiency, environmental effectiveness and acceptance and assess the potential of auctions as negative. 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 more influence due to the institutional innovations. The positive attitude of Basse-Normandie and especially Fryslân can be explained by the fact that they already have more experience with bottom-up approaches. Nevertheless, for these bottom-up approaches, especially the budget is seen as an obstacle, but also the risk averse behaviour of the responsible civil servants and the unsuitable general administrative structure pose problems. For most countries it can be concluded that as long as 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. Furthermore actors fear the effort which might be connected with the control of the work of LAG.

## 6 References

- Ahrens, H.; Lippert, C. and Rittershofer, M. (2000). Überlegungen zu Umwelt- und Einkommenswirkungen von Agrarumweltprogrammen nach VO (EWG) Nr. 2078/92 in der Landwirtschaft. *Agrarwirtschaft* 49 (2), 99-115.
- Arzt, K.; Baranek, E.; Müller, K. and Schleyer, C. (2003). Bedeutung, Modelle und Barrieren einer Regionalisierung der Agrarumweltpolitik und der Politik ländlicher Räume in der EU. *Berichte über Landwirtschaft* 81 (2), 208-222.
- Buller, H. (2000). The Agri-environmental Measures (2078/92). In: Brouwer, Floor and Lowe, Philip (eds.). *CAP Regimes and the European Countryside*. Wallingford/New York: CABI Publishing, 199-220.
- Cason, T. and Gangadharan, L. (2004). Auction Design for Voluntary Conservation Programs. *American Journal of Agricultural Economics* 86, 1211-1217.
- Dwyer, J.; Baldock, D.; Beaufoy, G.; Bennett, H.; Lowe, P. and Ward, N. (2002). Europe's Rural Futures - The Nature of Rural Development II: Rural Development in an Enlarging European Union. Comparative report. Brussels: WWF.
- Eggers, J. (2006). Good Governance in der europäischen Agrarumweltpolitik: Eine institutionenökonomische Mehrebenenanalyse. Paper presented at 46. Jahrestagung der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus (GeWiSoLa) vom 04. - 06. Oktober 2006 in Gießen.
- Eggers, J. (2005). Dezentralisierung der Agrarumweltmaßnahmen in der europäischen Agrarpolitik: Hemmnisse eines institutionellen Wandels. Beckmann, Volker und Konrad Hagedorn (Hrsg.). *Institutioneller Wandel in der Landwirtschaft und Ressourcennutzung*. Band 25. Shaker Verlag. Berlin.
- Eggers, J.; Laschewski, L. und C. Schleyer (2004). Agri-Environmental Policy in Germany: Understanding the Role of Regional Administration. Institutional Change in Agriculture and Natural Resources (ICAR) Discussion Papers 4/2004. Humboldt-Universität zu Berlin.
- European Commission (1999). Council Regulation (EC) No 1257/1999 of 17 May 1999 on Support for Rural Development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and Amending and Repealing certain Regulations.
- European Commission (2005) Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)
- European Court of Auditors (2005). Special Report No 3/2005 concerning rural development: the verification of agri-environmental expenditure, together with the Commission replies. In: *Official Journal of the European Communities*, C279/01.
- Fischler, F. (2000). *Working together towards Sustainable Rural Development in the 21<sup>st</sup> Century from an EU Point of View*. Speech delivered at the Rural 21 conference, 5 June 2000, Potsdam (Germany). URL: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/00/201&format=PDF&aged=1&language=EN&guiLanguage=en> (Download on 17 November 2004).
- Groth, M. (2005). Ein institutionenökonomisch fundiertes Pilotprojekt zur ergebnisorientierten Honorierung ökologischer Leistungen. An outcome-based payment scheme to reward ecological services seen from an institutional economics point of view. Erschienen 2005 im Jahrbuch der Österreichischen Gesellschaft für Agrarökonomie, Band 14, S. 175-185. On-line verfügbar: [www.boku.ac.at/oega](http://www.boku.ac.at/oega)
- Hagedorn, K. (2001). *Regionalisierung von Agrarumweltprogrammen: Gründe, Konsequenzen, Modelle*. Tagungsband zur Podiumsdiskussion der Umweltstiftung WWF Deutschland, des Deutschen Jagdschutzverbandes e.V. und der Humboldt-Universität zu Berlin über: „Die Agrar-Umweltprogramme. Naturschutz in ländlichen Räumen“ am 22. Januar 2001 in Berlin. URL:

- [http://www.wwf.de/c\\_kampagnen/c\\_landwirtschaft/c\\_pdf\\_downloads/Agrar-Umweltprogramme.pdf](http://www.wwf.de/c_kampagnen/c_landwirtschaft/c_pdf_downloads/Agrar-Umweltprogramme.pdf), 15-37.
- Hagedorn, K. (2000). Umweltgenossenschaften aus institutionenökonomischer Sicht. In: Kirk, Michael; Kramer, J. W. and Steding, R. (eds.). *Genossenschaften und Kooperation in einer sich wandelnden Welt*. Festschrift zum 65. Geburtstag von Prof. Dr. Hans-H. Münkner. Münster: LIT, 267-291.
- Hagedorn, K. (1993). Umweltpolitische und sozialpolitische Reformen in der Agrarpolitik. Parallelen und Unterschiede zwischen phasenverschobenen Politikprozessen. *Zeitschrift für Umweltpolitik und Umweltrecht* 16, 235-280.
- Hagedorn, K.; Arzt, K. and Peters, U. (2002). Institutional Arrangements for Environmental Co-operatives: A Conceptual Framework. In: Hagedorn, K. (ed.). *Environmental Cooperation and Institutional Change: Theories and Policies for European Agriculture*. Cheltenham, UK: Edward Elgar, 3-25.
- Holm-Müller, K., Radke, V., Weis, J. (2002): Umweltfördermaßnahmen in der Landwirtschaft - Teilnehmerauswahl durch Ausschreibungen? *Agrarwirtschaft* 51 (2), 112-120.
- Hailu, A. and Schilizzi, S. (2004). Are Auctions more efficient than fixed prices schemes when bidders learn? *Australian Journal of Management* 29, (147-168).
- Knickel, K., M. Kröger & S. Peter (2006). New ways in the management and valorisation of natural resources? Results of a comparative analysis of a sample of agriculture-environment projects of the Regional Action programme in Germany. In: H. Langeveld & N. Röling (eds.) *Changing European farming systems for a better future: New visions for rural areas*. Wageningen (NL): Wageningen Academic Publishers, 414-418.
- Latacz-Lohmann, U.; Van der Hamsvoort, C. (1997). Auctioning Conservation Contracts: A Theoretical Analysis and an Application. *American Journal of Agricultural Economics* 79 (2), 407-418.
- Lowe, P. and Baldock, D. (2000). Integration of environmental Objectives into Agricultural Policy Making. In: Brouwer, F. and Lowe, P. (eds.). *CAP Regimes and the European Countryside*. Wallingford/New York: CABI Publishing, 31-51.
- Marggraf, R. (2003). Comparative Assessment of Agri-environment Programmes in Federal States of Germany. *Agriculture, Ecosystems and Environment* 98, 507-516.
- Ménard, C. (1995): Markets as Institutions versus Organizations as Markets? Disentangling some fundamental concepts. *Journal of Economic Behavior and Organization* 28, 161-182.
- Niskanen, William D. (1968). Nonmarket Decision making. The Peculiar Economics of Bureaucracy. *American Economic Review*, 293-305.
- Osterburg, B. (2002). *Analyse der Bedeutung von naturschutzorientierten Maßnahmen in der Landwirtschaft im Rahmen der Verordnung (EG) 1257/99 über die Förderung der Entwicklung des ländlichen Raums*. Materialien zur Umweltforschung, herausgegeben vom Rat von Sachverständigen für Umweltfragen. Stuttgart: Metzler-Poeschel.
- Polman, N.; Slangen, L. (1999). Environmental cooperatives in agriculture: institutional concepts and empirical evidence. Paper presented at the 64th EAAE seminar, Berlin.
- Slangen, L. (1997). Nature production by farmers: how to organise. *European Review of Agricultural Economics* 24 (3/4), 508-529.
- Slangen, L (2001). Sustainable agriculture - Getting the institutions right. CEESA Discussion Paper No.1, 1/2001. Humboldt University Berlin, 35 p.
- Stoneham, G.; Chaudhri, V.; Ha, A. and Strappazon, L. (2002). Auctions for conservation contracts: An empirical examination of Victoria's Bush Tender Trial. Melbourne Business School Working Paper Series, Working Paper No. 2002-08.