

## **AGRI-ENVIRONMENTAL POLICY: UNDERSTANDING THE ROLE OF REGIONAL ADMINISTRATION**

**Jörg Eggers**

**Humboldt University Berlin, Germany**  
**joerg.eggars@agrar.hu-berlin.de**

**Lutz Laschewski**

**University of Rostock, Germany**  
**lutz.laschewski@uni-rostock.de**

**Christian Schleyer**

**Humboldt University Berlin, Germany**  
**christian\_schleyer@gmx.de**



*Paper prepared for presentation at the XI<sup>th</sup> Congress of the EAAE  
(European Association of Agricultural Economists),  
'The Future of Rural Europe in the Global Agri-Food System',  
Copenhagen, Denmark, August 24-27, 2005*

*Copyright 2005 by Eggers, Laschewski and Schleyer. 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.*

# AGRI-ENVIRONMENTAL POLICY

## UNDERSTANDING THE ROLE OF REGIONAL ADMINISTRATION

### Abstract

With regard to agri-environmental schemes (AES) under Regulation (EC) 1257/99, we suggest that their ineffectiveness, inefficiency, and divers uptake is inherent to the way they are institutionalised in the European CAP framework. Based on experiences of the GRANO research project that initiated two Agri-Environmental Forums in Brandenburg (Germany) to integrate local actors directly into designing and implementing local AES we argue that the process of designing AES can be conceptualised as a complex negotiation process at *Laender* level. The related institutional settings shape possible outcomes and scheme designs. With only “passive support” for decentralised and participatory approaches yet compulsory complex bureaucratic procedures on part of the EU, there are no incentives for *Laender* administrations to actively support those approaches.

**Keywords:** agri-environmental policy, subsidiarity principle, Germany;

**JEL classification:** H11; H77; Q18

### 1 Introduction

The reform of the Common Agricultural Policy (CAP) in 1992, the introduction of the Agenda 2000, and also the recently presented Mid-Term Review exemplify a new trend in agricultural policy in the European Union (EU) towards an agri-environmental policy and a policy for rural development. Among other things, agri-environmental schemes (AES) have been developed to remunerate environmental services provided by farmers within the framework of EU regulations, such as Regulation (EC) 1257/99. In recent years, agricultural economists and other rural researchers have paid a lot of attention to the new policy area mostly in the context of ongoing policy evaluations (compare, e.g., Baudoux, 2001; Brouwer and Lowe, 2002; Buller et al., 2000; Hagedorn, 2002; Marggraf, 2003; Osterburg and Nieberg, 2001). Additionally, AES have been subject to evaluation by EU organisations (e.g., Court of Auditors 2000) and policy actors (Dwyer et al., 2002). Although the general trajectory of shifting policy instruments has been welcomed by most academics the detailed analysis of AES has given room for quite substantial criticism.

The most striking observation has been the rather divers uptake of the opportunities offered in the former Regulation (EEC) 2078/92 as well as in the current Rural Development Regulation (EC) 1257/99. This can be said for the relative share of agri-environmental spending as well as for the design of AES. Since nation states seem to run rather different strategies towards agri-environmental issues the divers uptake cannot solely be explained by different natural conditions and farm structures. In Germany, due to the fact that the *Laender* are in charge of the design and implementation of rural development policies, AES vary widely within the country.

Diversity itself might not be an issue, if it were not related to a lack of effectiveness of AES and low efficiency. While most of the agricultural economics literature is quick to suggest more effective measures to monitor farmers' behaviour, the questions remains, why AES are offered that have little or even no environmental effect at all? Addressing the issue from this perspective turns the focus on a set of actors agricultural economists rarely address: the agricultural administration and the policy system at the regional level. The easiest hypothesis would be to assume an unwillingness of regional politicians to demand considerable efforts from farmers. Indeed, such arguments have been already exploited (Ahrens et al., 2000). Environmental arguments may serve as tools to create legitimisation for agricultural subsidies. In general, research into the political economy supports the view that agricultural lobbies maintain a strong influence on the design and shape of agricultural policies (Eggers and Hagedorn, 1998). However, this argument alone might not be sufficient. On the one hand, the increasing criticism caused by unresolved agri-environmental issues remains. On the other hand, there are measures that are indeed very demanding for farmers and environmentally effective.

Thus, a closer attention should be paid to another hypothesis. The lack of environmental effectiveness may be caused by insufficient decision-making and a weak performance of the agricultural

administrative system itself. Although, as we will outline in the following section, there are several arguments that have been raised in the discussion supporting this view, until now little systematic research has been undertaken. This is very surprising, given the market adoring rhetoric that many agricultural economists like to apply. Our own starting point, however, is a different one. Rather than to propose that either market mechanisms or *top-down* measures, like the EU agri-environmental policy organised by state bureaucracies, are the only solutions, we suggest that several institutional solutions (North, 1990) have to be found to address the variety of environmental as well as social conditions. Indeed, we argue that hybrid institutional arrangements - forms of co-operation, local structures of self-organisation and networks - have to play a significant role to develop sustainable agriculture (Hagedorn, 2001; Hagedorn et al., 2002).

This paper is based on experiences made in the context of the GRANO research project on “Approaches for Sustainable Agricultural Production in Northeast Germany”. In 1999 and 2000, respectively, so-called Agri-Environmental Forums (AEF) were established in two rural areas of the German *Land* Brandenburg. These forums are round tables that were initiated to seek for solutions to agri-environmental problems and to foster local co-operation. This paper focuses on the activities and results of one of these AEF. One of the experiences obtained was that while the round table appeared to be rather successful in the analysis of agri-environmental problems, it failed at implementation. The participants of this Agri-Environmental Forum, for instance, were absolutely able to *design* an AES to meet their perceived needs. At this stage, however, problems actually started. Although the GRANO project had a high political backup and a lot of political and public attention was paid to its results, attempts failed to install at least some of the proposals made by the AEF. It became obvious that it would not be sufficient to simply *encourage* participatory approaches at the local level. Such approaches would have to be linked vertically to the existing political system. An issue that Ostrom (1990) described as one of several design principles for successful and sustainable local self-governance: the “nesting” in the wider political system. While the general message appears to be rather obvious the question what this would entail, in general, and what would it mean for the European agri-environmental policy, in particular, remains.

In this paper, in order to make a first step, we attempt to analyse the regional administrations’ argumentation and behaviour and aim to develop an understanding of the actual action situation of “designing an AES”. The paper proceeds as follows. In Section 2 we briefly summarise the current German, and partly European, debate on AES. In Section 3, we introduce the basic concept of the Agri-Environmental Forum and describe its concrete activities and results as well as the negotiation process with the Brandenburg Ministry for Agriculture, Food and Forestry (MLUR) while trying to implement the AEF results. Subsequently, in Section 4 we identify and discuss factors that contributed to the failure of implementing the Local Agri-Environmental Scheme (LAES). Based on this analysis we sketch out the decision-making process in order to explain why AES are designed in a particular way.

## **2 Institutional Aspects of Current Agri-environmental Policies**

Although agricultural economists have not yet provided a comprehensive institutional analysis of the current bureaucratic agri-environmental regime in the framework of the CAP, literature still indicates various issues related to this question. The most common suggestion is that the lack of effectiveness can be traced back to the conflict of interest that is internal to AES in the EU. The existence of two concurring objectives - farm income support and environmental improvements - make it inevitable that the environmental effectiveness suffers. This argument very much supports the “unwillingness hypothesis” described by Ahrens et al. (2000). It has been argued, however, that international agreements may make it necessary to separate those objectives more clearly (Holm-Müller and Witzke, 2002). This has formally been undertaken. Yet, the general assumption of overcompensation has to be questioned. Some authors draw a more differentiated picture. In marginal regions, for instance, those measures that aim at extensifying the production have an additional positive effect as they give farmers an incentive to keep the land under production. In areas with high quality soils, however, the extensification payments usually do not fully compensate the economic loss due to comparatively high opportunity costs (Deblitz, 1999; Osterburg, 2002). This means that very often the income losses that are actually experienced when measures are applied depend on the soil quality and on other local conditions that can be quite different even within a *Land*. Nevertheless, the design of the measures and the

level of payments are not differentiated accordingly. Thus, as a matter of fact, farmers in intensively used arable areas tend to participate much less in such schemes than their colleagues farming on marginal land. This lack of differentiation has also been criticised by the European Court of Auditors (2000). The common suggestion is that premiums should be differentiated according to local conditions. Yet, little is known, why this has rarely been applied so far.

It has also been suggested that lack of effectiveness results from the fact that the present AES neither consider local environmental conditions nor local people's interest and their specific problems sufficiently (Deblitz, 1999; Buller, 2000; Lowe and Baldock, 2000). As a result, in some cases measures are developed that are poorly adapted to the local ecological, economic, and also cultural conditions. Therefore, the effectiveness as well as the cost-effectiveness of AES varies widely (Wilhelm, 2001; Marggraf, 2003). Yet, this is not in line with the original objectives of AES. At this point, the European Commission argues that most Member States (of the European Union) simply do not fully exploit the new scope and opportunities offered by the EU (Fischler, 2000). Regarding individual measures agricultural economists regularly stress that effectiveness as well as efficiency would increase if result-oriented rather than action-oriented remuneration were applied (e.g., Hampicke, 2001). Further, the lack of flexibility of requirements has regularly been criticised (Hampicke, 2001). Also, AES regularly require the participation of farmers for at least five years. The subsequent renewal of those contracts, however, cannot be guaranteed. In cases that require investments this may negatively affect the willingness of farmers to commit themselves to such contracts and, consequently, the introduction of long-term contracts has been suggested (Schramek, 2001). Until now, this recommendation has had little or no effect on the design of current AES.

In this paper we argue that these problems addressed by agricultural economists are inherent to the current policy regime that is based on contracts between state agencies and farmers about the provision of environmental goods. Yet, not only the contract approach itself has to be critically examined, but also the institutional context in which contracts are applied. Some of the issues addressed here, such as the lack of flexibility, are specific to AES in the EU and have been solved much more successfully in other institutional environments. In principal the restrictions of the policy regime are closely related to, often implicit, assumptions underlying conventional analysis such as neo-classical economics. AES within the CAP are accordingly based on the idea that they are complementary to other policy measures and also in addition to the basic compliance of farmers with legal minimum standards ("good farming practice"). The basic difference between "application of more restrictive legislation" or "payments for the provision of environmental goods" is understood as a question of allocation of property rights (Scheele, 2001). As long as farmers are considered to have the right to pollute society must compensate. However, in particular with respect to biodiversity, many extensive forms of farming, that are perceived to be environmentally very effective, are, under current economic conditions, economically not feasible (Hampicke, 2001). Here, payments to farmers may be given even if they do not have the rights to the respective nature components. Even though we also see the crucial importance of understanding property rights, we argue that the way it is conceptualised is insufficient. Therefore, "conventional analysis (...) makes assumptions that tend to exclude possible policy options from consideration" (Hodge, 2001: 103), and appears to be blind to its limitations. The concept itself is starting from a set of very restrictive propositions:

1. *Availability of consensus about environmental objectives*: This assumption puts the focus especially on the issue of implementation rather than decision-making. Thus, in the research and evaluation practice agricultural economists tend to draw on environmental experts' statements. Those experts seem to know what is good or bad. This does not necessarily comply with the economists' own view that consumers' willingness to pay does not necessarily go along with environmental scarcity. It is a well-known fact that some symbolic species may attract much more public attention than others. In consumers' perception aesthetic aspects may also play a more important role than detailed materialistic accounts, which are favoured by natural scientists. So far, European agri-environmental policies appear to follow a very science-based approach to nature. But even the assumption of a given, unchallenged objective position of natural sciences is unrealistic. Scientific knowledge about the environment is characterised by tremendous uncertainties. At the same time, scientists are rarely in the position to define independently what an environmental problem is. The effectiveness of AES, therefore, may differ depending on the existence of shared perceptions of

stakeholders about environmental objectives. Hence, evaluation of environmental instruments has to take the objectives of the actors into account (e.g., Mickwitz, 2003).

2. *Availability of knowledge and information:* With regard to the actual situation the mainstream discourse either implicitly assumes the availability of knowledge about linkages of farming practices with environmental outcomes, the availability of practical solutions to environmental problems and of relevant process information to all actors, or it simply ignores this question. Accordingly, the process of invention, design and adaptation of schemes as well as their implementation would not cause any - at least no significant - transaction costs. In the assessment of AES this is usually reflected in the fact that administration costs are not taken into consideration at all. However, as Falconer and Whitby (1999) have shown, transaction costs of policy implementation are not identical to administrative cost. For example, farmers may be confronted with significant transaction costs, too. Due to the nature of many agri-environmental issues, such as complexity and system dynamics, and because of the uneven distribution of information about behaviour patterns and outcomes between farmers, environmental experts and different administrations transaction costs involved may be considerable. In fact, regions at a sub-national level have deplored increasing administrative costs related to AES implementation (e.g., Osterburg 2002). Therefore, we conclude that in many circumstances those institutional arrangements that pay more attention to communication processes and to the exchange of knowledge and information are more suitable to solve agri-environmental problems.
3. *State and market:* Derived from neo-classical theory the conceptualisation of current AES is also based on a misleading dichotomy of state and market. Markets are somehow referred to as entities that exist outside the state, whereas the state is sometimes referred to as one big bureaucracy. The existence of market failures (external effects) is the main argument for the provision of AES by the state. "But the notion of a 'free' market without or prior to the state is an ideological abstraction. No market is possible without a society to provide it with moral, legal, political and administrative foundations." (Bell and Lowe, 2000: 286). Similarly, the concept of the state as a bureaucratic monolith does not reflect the reality adequately. In Europe, the state may be separated into sets of organisations at different levels (Europe, Nation State, Region, Municipalities). Arising from this observation, one important issue has been the question of allocation of competencies to lower levels of the political decision-making process (devolution or regionalisation). Based on the concept of fiscal federalism some authors tried to identify appropriate levels for a number of environmental issues (see, e.g., Robert Bosch Stiftung, 2000; Rudloff and Urfei, 2000). However, Hagedorn (2001) argued that this approach was insufficient since it was mainly focussing on the *spatial* features of environmental problems. Instead, he suggested that, from a theoretical point of view, the issue of regionalisation should be considered as subordinate to the development of a more profound understanding of the nature of the respective environmental problems at hand. The concept of the monolithic state may also be questioned from a different perspective. If we consider the provision of public goods as a core function of governmental institutions, we observe the tendency of states to make use of a wide range of institutional arrangements, such as governmental and quasi-governmental, but also intermediary organisations (chambers, associations, etc.) and private businesses. These very diverse and often hybrid forms of governance are necessary because the provision of public goods regularly requires inputs that are not under full control of a single public sector principal. Ostrom (1996: 1073), therefore, suggests to consider the provision of public goods as *co-production*, i.e., as a "process through which inputs are used to produce a good or services are contributed by individuals, who are not 'in' the same organisation." This may require the active involvement of co-producers, e.g., farmers, as well as the recipients in the production and decision-making processes.
4. *Environmental goods as products of individual farmers:* In AES, state agencies are contracting with individual farmers. This implies that individual farmers on individual plots *can* provide environmental goods. Yet, many environmental goods (or bads) to be produced (or not), such as cultural landscapes and nitrogen surplus in a watershed, are collective goods. They often require coordinated activities among farmers and/or with planning authorities. In this light, the assessment of AES without considering complementary measures and planning activities, as it is the current practice of evaluating AES, appears to be a futile undertaking.

Further points of criticism are the very restrictive (implicit or explicit) behavioural assumptions most agricultural economists employ (Hodge, 2001). Here, farmers are described as short-term, single (income) preference optimising calculators. Although we also consider farm income as a very important objective to understand farmers' behaviour, we argue that farmers may show high preferences for environmental protection, too. Under certain circumstances, they even have a self-serving interest to manage their (own) productive environmental resources sustainably. Finally, although statistics indicate that in the context of agrarian restructuring less and less agriculturally productive land is owned by the farmers themselves, little attention has been paid to this question. Farmers are conceptually treated as landowners; an assumption that is not supported by reality anymore.

Taking the discussion above into account, we can neither assume that market solutions in general may be considered as optimal for agri-environmental issues, nor that the current agri-environmental policy in the EU does provide the only or at least most important solution. Instead, various institutional arrangements may emerge and need to be designed in a way that reflects diverse environmental as well as social conditions. Therefore, we have to drop the assumption that agri-environmental issues in general can be solved through AES *alone*. It is important to understand the specifics of the European agri-environmental policies. Only if we develop a clear understanding of both, its strengths and its limitations, we may be able to evaluate its performance and, subsequently, to design alternative arrangements for various environmental concerns, but also for diverse social and institutional environments. Since AES constitute an important element of current European agri-environmental policy, in this paper, we focus on the question of designing those schemes.

The most common interpretation of the specific constraints experienced by regional (in Germany, the *Laender* level) agricultural ministries is the idea of them being restricted both by demands from the national ministry and from the European CAP ("doppelte Politikverflechtung") (Mehl and Plankl, 2002). Here, co-financing functions are very strong incentives for the regional administration to comply with the objectives of the policies supported by a higher level administration. Although the existence of a national as well as European level may cause tensions, it also offers room for manoeuvre for regional administrations since they can opt either for support from one or the other level or even for combining funding opportunities from both levels. Balancing constraints and existing financial opportunities, therefore, is a characteristic feature of rural policy making at the regional level. Thus, if we address the issue of the design of Rural Development Plans (RDP) at the regional level, maximising external funding may be seen as an important objective on part of the regional administration.

This institutional setting favours the pivotal position of the regional administration while regional parliaments are outplayed since their basic function has been reduced to only approve the complementary budget to schemes that have already been negotiated between the different administrative players (Laschewski et al., 2002). Yet, political competition remains partly important as was argued by Ahrens et al. (2000) based on experiences in the German *Land* Saxony-Anhalt. They suggest that the availability of external funding also puts pressure on the regional administration not only to maximise the inflow of external funding, but also to spend the money successfully. Clearly, a government that fails to spend available funds offers the opposition a wide door for public criticism. Consequently, the acceptance of the offered schemes by potential recipients is also an important issue for the scheme design. Thus, the administration most likely will apply strategies to ensure acceptance of the schemes such as the application of intensive communication with the clientele, low formal requirements, attractive financial conditions, and it will avoid complicated formal procedures.

Furthermore, designing AES is not only about drawing money into the region and directing the funds through the administrative to the political clientele; it is also about *managing* the schemes themselves. As we argued earlier, costs of monitoring and enforcing regulations may be significant. This assumption has already been validated, thus, the costs of managing AES have become more and more a concern for regional administrations (Osterburg, 2002; Ahrens et al., 2000). Beyond the relevance of budget concerns, Wilson et al. (1999) also stress the importance of the regional history of AES for understanding the way new schemes are implemented. In principal, they suggest the existence of path dependencies, that may occur because there might be complementary institutions. For example, changes of rules at one level may depend on changes of rules at another level (North, 1990). Indeed, as was already outlined, in the case of AES regional decisions are subject to approval by higher levels of

administration. Therefore, it may be costly to change an already approved scheme. Further arguments for the existence of path dependencies are, for example, past investments in knowledge and the emergence of interest groups with a vested interest in certain institutional arrangements (North, 1990). In the case of AES, learning costs are not only caused by the environmental issues themselves, but also by the processes necessary to develop successful strategies, to learn about farmers' responses and to cope with the formal bureaucratic procedures of the European policy system.

### 3 The Case Study

In this Section, we will first outline the basic concept of the Agri-Environmental Forum (AEF) and describe briefly concrete activities and results of the AEF in the *Prenzlau-West* region (Arzt et al. 2002). We will then focus on the negotiation process with the MLUR while trying to implement the Local Agri-Environmental Scheme (LAES). Here, we will concentrate on the period *after* the LAES was agreed on by the actors. This case study is based on experiences made within the GRANO research project conducted between 1998 and 2002. GRANO stands for "*Approaches for Sustainable Agricultural Production in Northeast Germany*", an R&D project that was carried out jointly by research organisations of the *Laender* Berlin and Brandenburg. The GRANO approach was based upon the perception that applied concepts for the sustainable use of agricultural landscapes have to be developed and implemented in a consensual way together with all relevant actors, such as farmers, environmentalists, interest groups and the administration. Moreover, scientific system rationality and stakeholders' know-how was combined to reach locally adapted and sustainable solutions. Hence, the methodology and the principles of Participatory Action Research were employed within this transdisciplinary project. Various sub-projects were carried out to implement and further develop strategies that had been identified together with local actors. They covered issues like sustainable tourism, regional marketing, regional planning and agricultural extension as well as regionalised agri-environmental policies (Müller et al., 2002). The objectives of the project group which initiated the AEF were to develop *and* to test approaches in order to a) increase the ecological and economic efficiency of AES, b) motivate more farmers to participate in those schemes and c) strengthen the democratic basis of agri-environmental transfer payments. Empirically, this Section is based on participatory observations and notes taken at the AEF meetings, on interviews with local stakeholders, and, in particular, on meetings and interviews with representatives of the relevant Brandenburg ministries.

#### 3.1 Concept and Activities of the AEF Prenzlau-West

The AEF can be described as a permanent round table where, on average, 15 local actors, such as farmers and environmentalists but also representatives of administrations and associations at local and district level, were discussing local agri-environmental issues. The participants exchanged information on these issues and discussed and agreed on ways and measures to tackle related problems. The AEF can be characterised as an "*institutional experiment*" that was initiated by the GRANO scientists to explore chances and barriers of shifting specific elements of decision making in the field of agri-environmental policy to regional actors. The forum was designed along basic principles of stable and sustainable structures of self-organisation as described, e.g., by Selle (1996) and Ostrom (1998). The meetings were organised and supported by a team of six GRANO scientists and moderated by an experienced professional. In particular, regular communication among participants as well as high levels of transparency, equality and representativeness were aimed at.

Before initiating the forum, the project group carried out an in-depth situation analysis based on qualitative, semi-structured interviews with local stakeholders. Moreover, plans, regional statistics, and other available information for the region were included. The kick-off meeting in September 1999 was followed by 13 successive meetings until the GRANO project ended in February 2002. At the first meetings, the participants of the AEF agreed to deal successively with the agri-environmental problems related to 'Sölle' (small, undrained pools that are typical for the north Brandenburg region), soil (wind) erosion, and hedgerows. The discussion in the forum was regularly facilitated by presentations by local actors as well as by GRANO and non-GRANO scientists and other experts in order to collect all available information necessary to identify or design the most suitable measures.

The measures developed by the AEF to deal with the first two issues were compiled in a LAES with an option to add measures related to other issues, such as hedgerows, at a later date. As Table 1 shows, the LAES predominantly contains *classic* measures, such as "Turning arable land in exten

sively used grassland”, that have already been part of the current AES in Brandenburg. In contrast to the current scheme, however, only plots with a “high risk of soil erosion” were eligible - one of the core innovations of the LAES. The scheme also includes *new* locally-adapted measures, such as “Protection of Sölle”.

Table 1: Individual measures of the LAES, developed by the AEF

Measure	Remarks
Protection of Sölle	Combined with regular EU set-aside premium
Permanent set-aside of ecologically sensitive parts of arable land	Only plots with higher risk of soil erosion are eligible; Measure of current scheme, but not open in 2000 and 2001
Non-plough tillage	Only plots with high risk of soil erosion are eligible; Measure within ‘old’ scheme under Regulation (EEC) 2078/92, not included in current scheme
Permanent soil cover all-the-year (e.g., intercrops)	Only plots with high risk of soil erosion are eligible; Similar measure in current scheme
Turning arable land in extensively used grassland	Only plots with high risk of soil erosion are eligible; Measure of current scheme, but not open in 2000 and 2001
Purchase of wide tyres	Investment financed by Article 33, Regulation (EC) 1257/1999

### 3.2 Realisation of the Local Agri-Environmental Scheme

Since the GRANO project’s funding by the Federal Ministry of Education and Research did not include funding of implementation of the results or measures developed within the project, it was a major concern from the very beginning to seek for options of external financing. For this reason, the Brandenburg Ministry for Food, Agriculture and Forestry (MELF) and the Brandenburg Ministry of Environment, Nature Protection and Regional Planning (MUNR) were approached for financing the forums’ results as early as in 1999. Both Ministries were merged to the Brandenburg Ministry for Agriculture, Environmental Protection and Regional Planning (MLUR) later in 1999. At the beginning of the GRANO project, both ministries had been very fond of the project’s approach and goals. However, MLUR officials pointed out that they would not be able to provide extra money to finance future schemes developed by the AEF given Brandenburg’s poor budget situation. As main alternative, however, they rendered support to integrate future scheme(s) - from 2001 onwards - as so-called “demonstration projects” in the RDP that had been submitted recently to the EU under Regulation (EC) 1257/99. Thus, the *Land* only had to provide 25 % of the total costs; 75 % of the funding was covered by the EU. However, the *Land*’s total amount of funding of any AES in the region was not to rise above the present level. Furthermore, only very few and fairly vague further alternatives for external funding, such as mixed funding from various development associations, etc., were suggested. As a consequence, special attention was paid to keep the individual measures exactly in line with the guidelines defined by Regulation (EC) 1257/99 while elaborating the LAES. At a follow-up meeting with MLUR officials in November 2000 it was again stressed that there would be no extra money to finance any scheme. Furthermore, the officials complained that so far the project group had not delivered any marginal cost calculations at farm level that could prove that the locally adapted scheme would indeed be more advantageous over the current scheme in terms of both participating farmers and economic and ecological efficiency. It was also pointed out that funding as “demonstration project” was no longer an option since the EU had not confirmed this specific part of the submitted RDP.

Thus, the only option left was to *replace* the current scheme by the newly developed one. Again, however, the *Land*’s funding of the new Scheme was not to exceed the present level. The project group was asked to deliver plausible figures, such as the number of farmers that would potentially apply for the local scheme, the acreage that would be covered and the money that would be needed. After the LAES was finally confirmed by the members of the AEF in November 2000 “fake” application forms containing the new measures were posted to *all* farmers in the Prenzlau-West region asking them to indicate their actual interest to participate in the new scheme once confirmed by the EU. The draft scheme was also informally posted to the responsible administrators of the European Commis

sion, Directorate General of Agriculture who confirmed that this scheme would most probably be accepted as a local substitute provided that Brandenburg submitted it to the EU. In August 2001, the local scheme was finally submitted to the MLUR. The document included plausible statements and calculations both on the acceptance (acreage, number of participants, necessary funds) and on the higher economic and ecological efficiency of the local scheme compared to the current scheme. An official response, however, came only in December 2001 when a MLUR official was invited to a meeting of the AEF. He appreciated the effort made by the forum to develop such a scheme, but he also pointed out that changing the RDP, i.e. resubmitting it to the EU, would not be possible before the Mid-Term Review in 2003. For the time being, there would be no other option as to wait until this date since this plan could only be changed *once*.

## 4 Embedding of Decentral and Participatory Approaches

While from an environmental policy perspective the response of MLUR might be considered frustrating we argue that, from an institutional perspective, the response is not surprising. It would have been very easy to interpret the reaction as unwillingness of the regional administration to implement *new* and *innovative* schemes. There is no question, given the strong personal commitment of the researchers in the participatory process, that this was the immediate and intuitive argument to apply. However, the question remained, assuming that the regional ministry's reluctance was based on farm lobbying influence, why the administration should reject a proposal that had seemingly a strong backing from farmers themselves? Hence, after the emotional dust settled, that had gone up at final stages of the project, we started to re-examine our empirical material trying to understand the constraints, which shaped the ministry's behaviour. Thus, in the first part of this Section we will analyse the arguments that have been brought forward in the discussion. Based on the case presented, in the second part we address the issue of decentralisation in terms of embedding or "nesting" of local participatory approaches into the institutional order of the current agri-environmental policy framework of the CAP. Drawing on experiences we made within the GRANO project our analysis highlights several issues that need further attention in future research.

### 4.1 Failing to realise the Local Agri-Environmental Scheme

During the negotiations, several political and administrative reasons that would impede the implementation of the measures have been brought forward by the MLUR. Table 2 provides an overview of the most critical factors, which we further elaborate in this Section.

Table 2: Critical factors that contributed to the failure of implementing the LAES

- 
- 1 *Issue of financing*: Poor budgetary situation of Brandenburg
  - 2 *Administrative concerns*: New measures might complicate the administration of AES and cause increased administration costs
  - 3 *Changing the RDP*: Only possible once during period 2000 to 2006
  - 4 *Missing proof of comparative advantage*: of LAES in terms of ecological/economical efficiency
  - 5 *Distribution*: a) within district; b) between districts
- 

At the beginning, the *budget constraints* for the (future) local scheme seemed to be most critical. Indeed, in the agri-environmental context Brandenburg's poor budgetary situation is reflected, for instance, by the fact that in the first two operational years of Regulation (EC) 1257/99 several measures of the RDP were not "opened". That means, farmers were not allowed to apply for *all* measures contained in the plan because the MLUR could not guarantee that their financial means to co-finance (25 % of the total) would be sufficient. Yet another indicator for Brandenburg's strained financial position is that, from 2004 onwards, the contract nature conservation schemes based on individual contracts between farmers and the *Land's* nature protection authorities will only be continued in designated nature protection areas. Since these individual contracts have been more flexible in terms of measure design and compensation level, and more open to subsequent adjustments, they have been very popular with farmers. These schemes have been financed exclusively by the *Land*, i.e. without EU co-financing. The *Land's* budgetary situation, however, has been worsening over the last decade, resulting in decreasing funds for these schemes, and finally leading to the decision to integrate those meas

ures in the recently updated RDP that is co-financed by the EU. Thus, EU co-funding of AES for agriculturally used areas becomes even more important. Of course, the amount of money available in a specific policy field, such as agri-environmental policy, is in the first place determined by political priorities, notwithstanding the actual - good or poor - budgetary situation. The LAES presented, however, would have (completely) substituted the current scheme. Consequently, *no additional funds* would have been needed to finance it. Still, the MLUR refused continuously to implement the scheme. Thus, in our case, the *poor-budget argument* - generally a strong argument - does not offer a sufficient explanation for the MLUR's resistance. In the light of Brandenburg's strained budget, the GRANO project group was also seeking for alternative sponsors, such as associations for nature protection and landscape conservation or other *Land* associations; finally without success. Due to strained financials and/or specific priorities, none of the associations approached have been willing and/or able to finance such a complex scheme *completely*. Mixed financing, however, would have resulted in a complicated and volatile structure. Integrating the AEF in a Leader+ group was another option pursued. Again, the negotiations failed since the Leader+ region approached only covered parts of the AEF region. Furthermore, the AEF was not perceived as a "local" initiative since it had been initiated and organised by "non-local" GRANO scientists.

*Administrative concerns* were a second line of argument on part of the MLUR. It was argued that an increased variety of measures might complicate the administration of AES and, thus, cause increased administration costs. In particular, MLUR officials were worried about *new measures* that might be more difficult to monitor or might entail more complicated - and labour-intensive - application processes. Indeed, in contrast to the current scheme, some measures of the "new" scheme were only eligible on plots with a certain high risk of soil erosion. On the one hand, this would require an appropriate and reliable data basis on which to decide whether a specific plot was eligible or not. On the other hand, this would mean an additional "step of approval" in the application process that could only be handled by the district's *environmental* agency which was usually not involved in the administration of schemes within the Common Agricultural Policy. Undoubtedly, both aspects would have far-reaching implications for administrative procedures and costs: Preparing reliable maps on a region's risk of soil erosion is costly and time consuming; changing "field-tested" administrative routines and/or integrating other administrative departments would entail processes that, above all, are more error-prone. For the case presented, however, the actual rise of administrative costs and efforts might have been manageable because the project group had already provided a soil erosion data basis and the LAES only contained *two* measures that had not been part of the previous and current AES. Having this in mind, one could assume that the MLUR anticipated a possible scenario with many dozens AEF each presenting one (or even more) LAES potentially disarranging and, at least, substantially *challenging* administrative structures and procedures in Brandenburg. This scenario might indeed, at least in the introductory phase, come along with a higher work load and costs for the administration, and it might also boost the risk regarding the monitoring process. Thus, for administration officials it was reasonable to assume that implementation costs, i.e. transaction costs would be higher.

Closely related to the administrative concerns presented in the previous paragraph, a third line of argument has been brought forward by the MLUR. In December 2001, a MLUR official affirmed - that it was not possible to *change the RDP* more than once during its term of validity, i.e. the years 2000 to 2006. This statement, however, is not corresponding with the Regulations (EC) 1257/99 and 1750/99 that allow for an annually update. At least, the LAES might have been integrated in the RDP and resubmitted to the EU in the context of the Mid-Term Review due in 2003. As was frequently pointed out by MLUR officials, modifying - and resubmitting - the RDP would cause considerable additional administrative work given - last but not least - the rather complex internal political dynamics. Again, a new compromise about the *new* tentative plan would be necessary. Furthermore, there would also be a certain risk that the resubmitted plan could be rejected by the EU. This would be especially true if the plan included innovative elements, such as the LAES, that were not in accordance with the mainstream. It may be important to stress that Brandenburg already experienced those difficulties by implementing a very specific measure according to Article 20 of the Rural Development Regulation. Even if we can act on the assumption that the European Commission would have actually accepted the AEF measures in question, it could not be formally proven. We also have to bear in mind the timing. In the years 2000 and 2001, when negotiations with the MLUR took place, the Regulation (EC) 1257/99 was only just approved and adopted and all administrative levels were quite busy to get

familiar with this new regulation and the new RDP. At that period of time, we argue, the willingness for “experiments” or further changes on part of the administration may have been reduced.

In this context of presumably higher administrative costs and risks we also have to assess the fourth argument of the MLUR that relates to a *missing proof* of the superiority of the LAES to the current scheme in terms of ecological and economic efficiency as well as acceptance by farmers. On the level of a concrete measure it was only fair to ask the project group to come forward with precise calculations and sound arguments in order to support the appropriateness of the measure and the level of compensation since the EU was expecting the MLUR to provide this kind of information when drawing up or changing the RDP. Consequently, this kind of information was included in the LAES proposal, but considered as insufficient by the Ministry without bothering to specify the deficits. Furthermore, the project group argued that all agri-environmental measures, that were actually being carried out in the Prenzlau-West region within the current scheme, were also part of the new scheme. In the new LAES, however, only plots with a certain high risk of soil erosion were eligible for those measures intended to reduce soil erosion. Hence, the money would be spent more targeted compared to the current situation and without abdicating locally accepted measures. Ironically, the apparently higher level of goal orientation and efficiency provoked the fifth argument of the MLUR: Farmers who received payments under the current system might be excluded under the new scheme because their plots would not be eligible anymore. However, such “discrimination” against those farmers might have negative income effects, and this, if plots with poor soils were concerned, could result in land abandonment. Furthermore, it would interfere with the “solidarity principle”, widely adopted in Brandenburg.

Apart from the distribution *within* a district, the MLUR underlined another kind of “discrimination”, i.e., the unfair distribution *between* districts. According to the concept of the GRANO project it was intended to develop and to test local schemes in (only) *two* sub-district regions, i.e. in the *Prenzlau-West* region and in the *Schraden* region in the south of Brandenburg. Consequently, only those farmers within these selected regions were exclusively authorised to participate in the local schemes. Currently, there is differentiation of this kind between Member States and between *Laender* in Germany only. If this is called “discrimination”, the AEF approach would simply lead to a “decentralisation of discrimination”. In principle, it would have been possible to “open” the LAES, including the newly developed measures, to all farmers in Brandenburg. In this case, however, the comparative advantage of *locally adapted* measures would have been lost. As a model of thought one could assume that each district implements its own AEF that is developing its own measures and, subsequently, providing them to the *Land*, thus compiling an extensive “shopping list”. The final decision of which measures were relevant for the region and should hence be opened to the farmers in this district, would rest with the district administration. This would require a shift of competence with regard to the design of measures and the respective decision making from *Land* to district level.

#### 4.2 General Obstacles to Implement Decentral and Participatory Approaches

To sum up, it is certainly difficult to precisely answer the question which single aspect was - or which combination of aspects were - finally decisive for the rejection - or neglect - of the LAES by the regional ministry. Reflecting all arguments mentioned above, we argue, that they did (and do) not constitute prohibitive formal reasons against the implementation of the LAES as - at least - some kind of pilot-scheme. Instead, we argue that five other aspects contributed greatly to the failure of the scheme implementation: *First*, MLUR officials were anticipating the administrative consequences, risks and costs resulting from a Brandenburg-wide implementation of AEF. The *second* aspect concerns the legitimacy of the AEF. The *third* aspect refers to missing incentives on part of the administration. This point is very closely connected with the *fourth* point, the definition of the subsidiarity principle that was introduced in the Maastricht Treaty. Somehow relevant for all points is our *fifth* point, the interest of the actors and the actor-constellation, where we consider several aspects as, e.g., path dependencies:

1. As was already pointed out, MLUR officials were anticipating a possible scenario with many dozens AEF and LAES which might have been a substantial “burden” for the administrative structures and procedures in Brandenburg. Higher work load and costs for the administration would be the unavoidable effects of this kind of decentralisation. Even though this was not explicitly mentioned by the officials, the risk connected with the implementation of the LAES, i.e. the risk of rejection

of a changed RDP, might have been estimated as prohibitively high. This holds even more true due to the unfavourable timing of the presentation of the LAES which took place nearly simultaneously with the implementation of the new Regulation (EC) 1257/99.

2. In contrast to its forerunner Regulation (EEC) 2078/92, the Regulation (EC) 1257/99 does not provide a chapter for any kind of pilot schemes, so-called “demonstration projects”. Thus, the LAES would have constituted a complete (regional) substitute to the current scheme. In this case, however, the legitimacy of the activities and the results of the AEF becomes an important issue. Here, several questions have to be answered: What role can such a forum of non-elected representatives play within a given democratic and decentral (federal) administrative and political system? In its present form, the AEF has no formal and legal decision making power in this system. It can rather be seen as some kind of local advisory committee that is preparing and proposing catalogues of measures to official administrative bodies within the federal system. So far, however, there are no clear and binding procedures to implement these measures. The critical aspect of the AEF’s legitimacy applies also for the design of its internal decision making processes since only a consensus rule was applied (Arzt, 2003). More formal by-laws might provide more differentiated decision rules including appropriate sanctioning mechanisms. For the definition and the comprehensiveness of formal by-laws, it is crucially important to decide whether or not and which competencies (rights and duties) shall be delegated to such a local institution, e.g., the choice of relevant measures and eligible plots and/or even the monitoring of correct application of the measures, etc. Furthermore, formal by-laws and the composition of the AEF participants should reflect the socio-cultural context and, hence, have to be adapted to specific national, regional or even local conditions.
3. Another fundamental explanation is the missing incentives for the administration at *Laender* and district level to actively support the AEF and the new scheme: In principle, the GRANO approach seems to be in line with the European rural development policy, following the subsidiarity principle as quoted in the Regulation (EC) 1257/99 “...given the diversity of the Community's rural areas, rural development policy should follow the principle of subsidiarity; whereas it should therefore, be as decentralised as possible and emphasis must be on participation and a ‘bottom up’ approach” (European Commission 1999: L160/81). Referring to this approach, Lowe and Brower (2000: 334) even predict that “in the short and medium term, the most significant implications of the Regulation concerns potential changes in procedure that could lay the basis for new institutional structures for rural development programming and support, around which over time the larger CAP could be transformed”. The experiences made with the AEF and with the attempts to implement its results, however, do not support their rather optimistic predictions. Two aspects are important here: First, although the Regulation (EC) 1257/99 does indeed formally encourage policies that are “as decentralised as possible”, emphasising the role of participatory and bottom-up approaches, it still neither provides clear incentives to promote decentralisation below the *Laender* level nor does it ask for any kind of local institutional innovations. Second, the Commission’s requirements for AES in terms of design, implementation, application procedures, controlling, monitoring, and evaluation is fairly demanding for the respective administrations at *Laender* and district levels, i.e. bottom-up approaches also have to meet these requirements and, thus, heavily depend on substantive support from the respective administrations.
4. For both aspects mentioned above, the subsidiarity principle that was introduced in the Maastricht Treaty, should be relevant. As stated in the protocol on the application of the principles of subsidiarity and proportionality annexed to the Amsterdam Treaty, however, the application of the subsidiarity principle is only demanded from the European institutions but not from the Member States (Treaty of Amsterdam). Referring to the Amsterdam Treaty, the question arises whether subsidiarity has any relevance for the individual Member State at all. Indeed, there is no reason why it should be the EU and not the Member States to decide on the degree of decentralisation of AES, any initiative in this field rests with the respective Member State or *Land*. Even in case the Regulation (EC) 1257/99 would provide an active support for institutional innovations, there is no guarantee that the interests of the Member States or *Laender*, respectively, are in line with the EU interests. Both aspects, the “passive support” for decentralised and participatory approaches, and the insistence on complex bureaucratic procedures with regard to AES might lead to the question how much participation and regionalisation the European Commission really wants. To answer this

question, it has to be investigated how officials of the European Commission actually handle applications for local approaches to be implemented at sub-district level. Furthermore, it has to be analysed in which way and to what extent the bureaucratic effort connected with the implementation of such local approaches might prevent steps towards more decentralisation (Eggers, 2004).

5. Analysing the interests of the officials in the Member States and in the *Laender* in Germany, respectively, seems to be even more complex. One rather obvious objective might be to transfer as much money as possible from the EU to the respective *Land* and, thus, to increase - or at least to stabilise - the farmers' income. Officials from other EU departments, e.g., the Department of the Environment, might rather aim at directing more money to environmental issues (Eggers and Hagedorn, 1998).

Apart from the aspect referred to in the last, fifth, bullet, the number and the degree of differentiation of measures is mainly restricted by three concerns that are - at present - central for the *Land*'s authorities when designing AES:

*First*, funds are preferably distributed equally within the regions rather than according to other objectives. Obviously, the distribution argument has to be seen in relation with payments made in the first pillar of the CAP, i.e. the direct payments. Until the recent reform in 2003, the composition of those payments has favoured arable production and intensive animal husbandry. Given the nature of Brandenburg's main agricultural problem, i.e. maintaining agriculture in less favoured areas, the AES are obviously seen as instruments to make agricultural subsidies accessible to those farmers that are not eligible to other (direct) payments. In Brandenburg's AES, this is reflected, first, in the fact that most of the money is directed to compensatory measures in less favoured areas without additional environmental requirements - focussing on meadows and extensive grazing - and, second, in the fact that environmental requirements of most measures are easy to be met by farmers. The AES, therefore, functions as a tool to compensate some of the perceived (distribution-related) unfairness of the CAP itself.

*Second*, potentially higher costs for "political negotiations" and "managing" more differentiated bundles of measures have to be considered: designing AES includes negotiation processes between the *Land* ministry and the EU. In order to be eligible for EU co-funding, the ministry has to prove that the content and the designated formal procedures, such as monitoring and sanctioning, of the RDP comply with EU regulations. However, the ministry has also to negotiate with the *Land* parliament, and, depending on the structure of the scheme, with authorities at the national level in order to obtain co-funding.

*Third*, completely "new" measures and procedures are not easily implemented in the political and administrative system; e.g., formal procedures for the approval may be difficult and costly in terms of money and time, and the actual effects of these "new" measures and procedures are perhaps uncertain. Thus, there is a common strategy to copy - or only slightly modify - measures and procedures that have been either already established in the *Land* or proven to be successful in other regions. This is in line with Douglas North stressing the (often retarding) role of path dependencies when looking at institutional change (North, 1990). Within an existing institutional framework, therefore, institutional change will most likely take place only in an incremental way, e.g., caused by changes in the regional power structures or in the European Rural Development Regulation. However, none of these changes necessarily imply increasing efficiency or effectiveness.

For these reasons, measures are often copied from already existing AES that have already been approved by the EU, and distributed within the *Land* as even as possible. In contrast, from the administration point of view, more targeted measures or schemes are making the negotiation and approval process more complicated and they carry a higher risk of financial correction. In the case presented, however, the failure to implement the LAES was also due to the fact that the *Land* Brandenburg provides neither any scope for institutional innovations nor any procedures how to implement results of local institutions, such as the AEF. This concerns issues such as a) how to finance results, b) how to assess the economic and ecological efficiency of the developed schemes, and c) how to assess the impacts on administration costs. Beyond that, a concept for interaction of local institutions with administrative and political bodies at district level is missing. In the absence of clear procedures, success of decentral institutions seemingly depend on the state's budgetary position, the state's political priori

ties, and the availability of funding alternatives within the non-governmental organisation (NGO) sector. Furthermore, the motivation and competence of local actors as well as their ability to lobby at all political levels, the levels of risk aversion on part of the relevant administrative and political authorities at all levels and their openness to innovative approaches play an important role. We assume that this holds true not only for the Brandenburg case.

## 5 Conclusions

The paper started with the observation of a rather diverse uptake of AES in Europe and a lack of effectiveness and efficiency of current AES. In the literature we presented, several arguments to explain these facts can be found. However, we considered those explanations as insufficient and, instead, we suggested that the ineffectiveness and inefficiencies were inherent to the way AES are currently institutionalised in the framework of European agricultural policies. In our case study we outlined that the process of designing AES in Germany can be conceptualised as a rather complex negotiation process at *Laender* level. The institutional settings in which this negotiation process takes place shape the possible outcomes and, thus, the design of the schemes. Paradoxically, this may even lead to outcomes which the EU itself did not intend in the first place. Since decentral approaches beyond the *Laender* level are not explicitly provided for by the relevant EU Regulations, there is no necessity for national or *Laender* governments to support or implement any kind of local organisations, such as the AEF. On the contrary, the tight rooms for manoeuvre within the current Rural Development Regulation rather increase risks, work load and costs for the regional administration when trying to implement such local participatory approaches.

Regarding the EU, better incentives to promote participation and decentralisation below *Laender* level as well as active support of local participatory approaches should be provided. For example, a special chapter supporting “demonstration projects” could be integrated into Regulation (EC) 1257/99. Decentralisation, however, does not only mean shifting competencies and responsibilities to administrations at district level. It also implies, that participatory approaches at the local level require modifications of rules and procedures at all levels of the multi-level system of European agri-environmental policy. Otherwise, one would suspect that higher administrative costs and efforts that might come along with the design, implementation, monitoring, and evaluation of LAES are not outbalanced by their increased acceptance and their higher ecological and economic efficiency. Clearly, much more research is needed in order to better understand the respective political and institutional determinants of such processes. Finally, it can not be expected that the lack of effectiveness and efficiency can be wiped out completely from the current European Agri-environmental Policy framework. Any policy framework will have certain blind spots due to transaction costs and rent-seeking activities involved. Therefore, we should also refine the central questions to be addressed in future research into: What *kind of problems* can actually be solved within the given framework? and Which *alternative policies* are required to cope with the weaknesses of the current system?

## 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: 99-115.
- Arzt, K. (2003). Kooperation zur partizipativen Zielfindung bei regionalen Agrarumweltproblemen. Zweiter Zwischenbericht für die Deutsche Bundesstiftung Umwelt zum Promotionsvorhaben. (Unpublished manuscript, 30.06.2003).
- Arzt, K., Baranek, E., Berg, C., Hagedorn, K., Lepinat, J., Müller, K., Peters, U., Schatz, T., Schleyer, C., Schmidt, R., Schuler, J. and Volkmann, I. (2002). Dezentrale Bewertungs- und Koordinationsmechanismen. In Müller, K., Toussaint, V., Bork, H.-R., Hagedorn, K., Kern, J., Nagel, U.-J., Peters, J., Schmidt, R., Weith, T., Werner, A., Dosch, A. and Pierr, A. (eds.). *Nachhaltigkeit und Landschaftsnutzung: Neue Wege kooperativen Handelns*. Weikersheim: Margraf-Verlag, 29-96.
- Baudoux, P. (2001). Beurteilung von Agrarumweltprogrammen – eine einzelbetriebliche Analyse in Baden-Württemberg und Nordbrandenburg. *Agrarwirtschaft* 50: 249-261.

- Bell, M. M. and Lowe, P. (2000). Regulated Freedoms: the market and the state, agriculture and the environment. *Journal of Rural Studies* 16: 285-294.
- Brouwer, F. and Lowe, P. (eds.) (2000). *CAP Regimes and the European Countryside*. Wallingford/New York: CABI Publishing.
- 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.
- Buller, H., Wilson, G. A. and Höll, A. (eds.) (2000). *Agri-environmental Policy in the European Union*. Aldershot, UK: Ashgate.
- Court of Auditors (2000). Special Report No 14/2000 on "Greening the CAP" together with the Commission's replies. In *Official Journal of the European Communities*, 43, C353.
- Deblitz, C. (1999). Vergleichende Analyse der Ausgestaltung und Inanspruchnahme der Agrarumweltprogramme zur Umsetzung der Verordnung (EWG) 2978/92 in ausgewählten Mitgliedsstaaten der EU. *Landbauforschung Völkenrode, Sonderheft* 195.
- 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. (2004). Institutionelle Hemmnisse einer dezentralen Ausgestaltung der Agrarumweltmaßnahmen in der Europäischen Agrarpolitik. Aachen: Shaker (forthcoming).
- Eggers, J. and Hagedorn, K. (1998). Umwelteffekte und agrarumweltpolitische Ansätze der „Agenda 2000“. *Agrarwirtschaft* 47: 482-491.
- 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.
- Falconer, K. and Whitby, M. (1999). The Invisible Costs of the Scheme Implementation and Administration. In Huylensbroeck, Guido van and Whitby, M. (eds.). *Countryside Stewardship: Farmers, Policies and Markets*. Kidlington, Oxford: Elsevier Science Ltd., 67-88.
- 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).
- Hagedorn, K. (ed.) (2002). *Environmental Cooperation and Institutional Change: Theories and Policies for European Agriculture*. Cheltenham, UK: Edward Elgar.
- 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. [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, M., 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., Arzt, K. and Peters, U. (2002). Institutional Arrangements for Environmental Cooperatives: A Conceptual Framework. In Hagedorn, K. (ed.). *Environmental Cooperation and Institutional Change: Theories and Policies for European Agriculture*. Cheltenham, UK: Edward Elgar, 3-25.
- Hampicke, U. (2001). Agrarumweltprogramme und Vorschläge für ihre Weiterentwicklung. In Osterburg, B. und Nieberg, H. (Hrsg.): *Agrarumweltprogramme – Konzepte, Entwicklungen, künftige Ausgestaltung*. Landbauforschung Völkenrode, Sonderheft 231: 97-109.
- Hodge, I. (2001). Beyond Agri-environmental Policy: Towards an Alternative Model of Rural Environmental Governance. *Land Use Policy* 18: 99-111.
- Holm-Müller, K. and Witzke, H. P. (2002). Das moderne Konzept der internen Subventionierung als Kriterium zur Identifizierung von Wettbewerbsverzerrungen bei europäischen Agrarumweltmaßnahmen. *Agrarwirtschaft* 51: 231-238.

- Laschewski, L., Teherani-Kroenner, P. and Bahner, T. (2002). Recent Rural Restructuring in East and West Germany: Facts and Backgrounds. In Kovach, I., Halfacree, K. and Woodward, R. (eds.), *Leadership and Local Power in European Rural Development*, Aldershot: Ashgate, 145-172.
- 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.
- Lowe, P. and Brouwer, F. (2000). Agenda 2000: A Wasted Opportunity?. In Brouwer, F. and Lowe, P. (eds.), *CAP Regimes and the European Countryside*. Wallingford/New York: CABI Publishing, 321-334.
- Marggraf, R. (2003). Comparative Assessment of Agri-environment Programmes in Federal States of Germany. *Agriculture, Ecosystems and Environment* 98: 507-516.
- Mehl, P. and Plankl, R. (2002). Regionale Agrarpolitik in Deutschland – Handlungsspielräume in einem verflochtenen Politikfeld. In *Jahrbuch des Föderalismus 2002*. Baden-Baden: Nomos, 199-210.
- Mickwitz, P. (2003). A Framework for Evaluating Environmental Policy Instruments - Context and Key Concepts. *Evaluation* 9: 415-436.
- Müller, K., Toussaint, V., Bork, H.-R., Hagedorn, K., Kern, J., Nagel, U.-J., Peters, J., Schmidt, R., Weith, T., Werner, A., Dosch, A. and Piorr, A. (eds.) (2002). *Nachhaltigkeit und Landschaftsnutzung: Neue Wege kooperativen Handelns*. Weikersheim: Margraf-Verlag.
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- 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.
- Osterburg, B. and Nieberg, H. (eds.) (2001). *Agrarumweltprogramme – Konzepte, Entwicklungen, künftige Ausgestaltung*. Landbauforschung Völknerode, Sonderheft 231.
- Osterburg, B. and Stratmann, U. (2002). Die regionale Agrarumweltpolitik in Deutschland unter dem Einfluss der Förderangebote der Europäischen Union. *Agrarwirtschaft* 51: 239-279.
- Ostrom, E. (1998). The Institutional Analysis and Development Approach. In Tusak-Loehman, E. and Kilgour, D. M. (eds.), *Designing Institutions for Environmental and Resource Management*. Cheltenham, UK: Edward Elgar.
- Ostrom, E. (1996). Crossing the Great Divide: Coproduction, Synergy, and Development. *World Development* 24: 1073-1087.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- Robert Bosch Stiftung (ed.) (2000). *Agrarumweltpolitik nach dem Subsidiaritätsprinzip*. Denkschrift des Schwäbisch Haller Agrarkolloquiums der Robert Bosch Stiftung. Berlin: Analytica.
- Rudloff, B. and Urfei, G. (under supervision of Henrichsmeyer, W.) (2000). *Agrarumweltpolitik nach dem Subsidiaritätsprinzip: Kategorisierung von Umwelteffekten und Evaluierung geltender Politikmaßnahmen*. Berlin: Analytica.
- Scheele, M. (2001). Agrarumweltmaßnahmen als Kernelement der Integration von Umwelterfordernissen in die Gemeinsame Agrarpolitik - Entwicklungsstand und Perspektiven. In Osterburg, B. and Nieberg, H. (eds.), *Agrarumweltprogramme - Konzepte, Entwicklungen, künftige Ausgestaltung*. Landbauforschung Völknerode, Sonderheft 231, 131-143.
- Schramek, J. (2001). Agrarumweltprogramme in der EU – Ergebnisse aus 22 Fallstudienregionen. In Osterburg, B. and Hiltrud N. (eds.), *Agrarumweltprogramme – Konzepte, Entwicklungen, künftige Ausgestaltung*. Landbauforschung Völknerode, Sonderheft 231, 65-76.
- Selle, K. (ed.) (1996). *Planung und Kommunikation. Gestaltung von Planungsprozessen in Quartier, Stadt und Landschaft. Grundlagen, Methoden, Praxiserfahrungen*. Wiesbaden und Berlin: Bauverlag.
- Wilhelm J. (2001). Ergebnisse einer Ausgaben-Wirksamkeits-Analyse der Agrarumweltprogramme. In Osterburg, B. and Nieberg, H. (eds.), *Agrarumweltprogramme - Konzepte, Entwicklungen, künftige Ausgestaltung*. Landbauforschung Völknerode, Sonderheft 231, 25-32.