



ENCA Seminar 22 April 2010, Brussels

Environmental Land Management from the CAP – evidence of past success and the scale of future need

This seminar was organised by ENCA's Sustainable Land Use Interest Group. It brought together participants from ENCA, the European Commission, NGOs and research bodies to provide a wide range of experience and views. All participants attended in their personal capacity as experts in their field.

This paper provides a record of the main points raised by participants in response to the presented research. There is no implication that consensus was reached on every individual point. The presentations and the original research papers can be read separately and are not reproduced here.

All the presentations are available to download from the ENCA website at <http://encanetwork.eu>

Introduction

ENCA's vision is for a transformation of CAP into a system that rewards farmers for beneficial environmental practices. A CAP focused on sustainable policies would produce a more competitive farming sector, improved health and wellbeing for European citizens and a secure future. ENCA believes that existing agri-environment schemes (AES) have the potential to deliver these aims. The case studies presented in this seminar support this view.

ENCA hopes that the discussion at this seminar will advance our understanding of how to secure environmental benefits from CAP, and will form a constructive contribution to the public debate initiated by Commissioner Cioloş.

Morning session: delivering environmental benefits from European Agri-Environment Policy

Introduction

At this point in time, there is major debate in Europe about how to integrate agriculture and environment. Although AES are not the only tools available, they are the most important. We should not be misled by the very critical reports on AES that are sometimes published.

The morning session focuses on evidence of success. Studies from three European Member States demonstrate that AES are delivering environmental benefits, and although improvements are still needed, great progress has already been made.

Evaluating agri-environmental schemes in Germany – some considerations for the post 2013 period. Bernhard Osterburg, von Thünen Institute, Braunschweig

The presentation gave a review of AES in Germany, and offered insights into how to evidence of the effectiveness of schemes can be obtained.

- Flat-rate payments are calculated based on the average farm. Therefore farmers with below-average costs have more to gain from the scheme. This may be beneficial, as these farms tend to be the ones with higher biodiversity.
- Biodiversity benefits from AES that provide incentives to farmers to maintain traditional land use patterns. Involving farmers and gaining their enthusiasm is more effective than regulation.
- Mitigation of GHG emissions is becoming a key objective. We need to consider the synergies and conflicts with biodiversity objectives.
- More result-oriented measures are needed. Farmers should be given ownership of the objectives and more freedom to implement them.
- More landscape-oriented schemes are needed to avoid patchy land management.
- Results are much harder to measure than costs. Co-ordination between regions is needed to get large enough data samples for statistical analysis.
- Criticism of AES has been from a very academic perspective. However, evidence for the effectiveness of AES is available from many sources, not just the peer-reviewed scientific literature. It can be difficult to produce statistical evidence because long-term monitoring of many complex factors is required.

Positive benefits of Agri-environmental policies in Estonia. Iiri Selge, Agricultural Research Centre, Tallin

The presentation described how the introduction of AES in Estonia has brought several positive benefits.

- Data is now collected from 66 monitoring farms. This allows testing of AES in a relatively controlled environment. The data allows the Research Centre to advise policy makers which factors are significant in enhancing biodiversity.
- AES helps to maintain farming in marginal areas. Semi-natural community farming systems and large organic farms rely heavily on AES support. If this support was withdrawn, there would be a risk of land abandonment and the loss of biodiversity.
- One requirement of Environmentally Friendly Management is for the farmer to attend compulsory training sessions. The training explains environmental issues and presents the results of AES monitoring. The majority of farmers report an increased interest in sustainable agriculture after joining an AES.

First discussion session

An outline of the situation in Austria.

- Austria has a well established AES programme. There are many 'broad and shallow' measures as well as some more targeted biodiversity measures. Uptake of the targeted measures has increased in recent years but is still low.
- Austria carries out evaluations of AES, aiming to compare areas with and without AES. There have been some positive findings, but in many studies it has not been possible to find differences in biodiversity between scheme and non-scheme areas. Because of the huge amount of variety in natural systems, very large data sets are needed to statistically demonstrate any effect of AES.
- Academic research is expensive and Austrian monitoring schemes are constrained by resources, so it is not always possible to carry out full evaluations.

Making the best use of the different sources of data available

- High-quality scientific work is important but there is a lot of other monitoring information available which is also very valuable.
- One common problem is that scientific studies need a control group where AES are not applied. It is often not politically acceptable to fund such a control group using money set aside for AES.
- People carrying out monitoring need to co-operate more, think more strategically, and pool their experiences. We can then see which areas are worthy of more resource-intensive research. For example, in the Estonian case study it was important to prove that flower density is beneficial for bumblebees in order to demonstrate the value of planted strips as an agri-environment measure. Now this point is proven, it would be worth moving the focus onto other questions.

Importance of regulation versus incentives

- Regulation alone is not the most appropriate tool to achieve biodiversity aims: with appropriate incentives farmers can become active and enthusiastic stewards of biodiversity. For other policy areas, such as greenhouse gas emissions, regulation may be more appropriate. A combination of measures is needed to achieve environmental aims.
- The lack of uptake of certain voluntary measures remains a problem.
- Experience has shown that when flat rate payments are high compared to costs, farmers are more likely to join the scheme. If the flat rate payment exactly balances out the extra costs, the extra work and inconvenience are enough to dissuade farmers from joining.
- Administrations in different Member States do not calculate costs in the same way. For example in the dairy sector, farmers in different Member States receive different amounts of money even though their costs are theoretically the same.
- We need to provide incentives for continual improvement, beyond compensating for costs. Currently, one of the options to do so under international trade rules is by auction/ tendering. However, farmers in European MS tend to be strongly opposed to tendering, so this mechanism is very rarely used.
- Currently, there is no technical support for pilot projects as there is for monitoring. Member States cannot try anything new without fear of punishment from the administration, so there is no space for innovation.

United Kingdom: Review of environmental benefits supplied by agri-environment schemes. Nigel Boatman, Food and Environment Research Agency, York, England.

The presentation reviewed the benefits of AES in the UK from their beginnings in the 1980s to the present.

- Monitoring is vital both to discover which measures are working, and to demonstrate to policy makers and the public that the expenditure is producing results.
- Long-term monitoring is needed to reveal long-term trends, for example in bird populations. However, short term studies are also needed to provide quick, up-to-date information to influence policy. The spatial scale of implementation and evaluation may also affect the results.
- The overall success of a measure depends partly on uptake by farmers. We need to put more effort into encouraging farmers to implement the most valuable measures for biodiversity.
- Management needs to be tailored to the specific site: general requirements are not always successful.

- AES alone are not sufficient to achieve resource protection objectives such as protecting water quality. For example, buffer strips can be effective when applied at specific points where pollution is entering the water, but they cannot compensate for poor management practices at the farm scale.

Second discussion session

High Nature Value farming (HNVF) in the UK

- The term HNVF is often used at the European level. There have been attempts to define HNVF by the European Environment Agency and others, but there is still no clear agreed definition.
- Up to now, AES in the UK have not been targeted at HNVF.
- The concept will become increasingly important in the UK and we do need to take it into account.

UK grazing issues

- On the uplands, mixed grazing with sheep and cattle is more beneficial than sheep grazing alone, but it is getting less economically viable to graze cattle on the uplands. There are some incentives within the UK AES to encourage mixed grazing, but it remains to be seen whether these will be adequate.
- The UK is seeing evidence of reduction in grazing levels. This is generally good for the environment, although in some places undergrazing is becoming a problem.

Land abandonment

- Abandonment can be a problem in habitats not eligible for single farm payments, for example hillsides in Mediterranean Member States and heathland in Germany.
- In the UK, many different land uses compete for a limited amount of land. Where agricultural production ceases, the land is likely to be used for nature conservation, forestry or energy crops rather than be abandoned.
- In the Scottish uplands, there has been a reduction in livestock numbers and decline in the level of management. We are currently trying to design AES to address this. In the UK uplands generally intensive agriculture is becoming uneconomic. We have an opportunity to decide what the future of the uplands should be.
- AES have helped in Estonia to avoid land abandonment. The majority of the Single Area Payment funding goes to the smaller holdings, which would probably not be farmed without the SAP support.
- The issue is widely discussed in Germany but flat rate payments and self-selection leads to a concentration of support in Less Favoured areas. In the past, policy decisions taken by the German administration have led to the removal of biodiverse land from payment schemes, e.g. heathland and orchards or landscape elements. It is hard to find information on why this land is not in the system, but one assumption is, that farmers fear economic disadvantages.
- In Austria, the issue is rarely discussed. However, there are remote areas where farming is dependent on AES and Less Favoured Area payments.
- Abandonment is a major problem in Slovenia despite rural development payments. One reason is the small average size of farms. The administrative costs of keeping up with AES requirements are too high, forcing people to leave farming.

Designated areas

- It would be useful to know what proportion of Natura 2000 sites and other designated areas are covered by targeted agri-environment measures. We do not have these specific figures for the UK, but we do know that Higher Level Stewardship (HLS)

schemes are more concentrated on areas of higher value. In England, about 93% of our high-value sites (the equivalent of Natura 2000) are covered by HLS agreements.

- In Estonia, the management of 20000 hectares of semi-natural communities in Natura 2000 sites is supported by AES. These sites are also High Nature Value.
- In Germany, AES spending is focused on designated areas.

Landscape scale approach

- A landscape approach would be more logical than the current farm-scale schemes.
- An obvious example is management to improve water quality: measures need to be implemented over the whole river catchment to be effective. Another example is reversing the decline in bird populations: management on a few farms scattered throughout the landscape will not provide sufficient habitat.
- How to implement a landscape approach in practice is still an area for improvement.

Opinions on the importance of long-term versus short-term studies

- Populations vary naturally from year to year so no conclusions can be drawn from short-term monitoring.
- Long-term monitoring is particularly important for certain aims, such as monitoring changes in bird populations or re-creating species-rich grassland: these things do not happen quickly. However, there are things that can be monitored on a more short-term basis, and this is important because policy moves quickly.
- Focused case studies are an important way to demonstrate specific points to policy makers.
- In some evaluations of AES, the results are too broad and it is difficult to see exactly what is going on in reality. For example, on farms where biodiversity was high to start with, no improvement was recorded when AES were introduced. This did not mean that the agri-environment measures are ineffective, but that the already high biodiversity had been maintained.

Importance of advice to farmers

- Advice from public agencies is important. Advisors need to understand the traditional land ownership systems and other aspects of the local situation. If advisors work in the same area over a long period they gain in-depth local knowledge and build a relationship with the community.
- In arable systems in the UK, the majority of measures taken up by farmers have focused on boundary management, with far less action taken in-field. This means there is limited benefit to species that need habitat in both field margins and field centres. Each farmer chooses the most convenient options for him/herself, without considering the need for a range of different options in the area. It is important to communicate the underlying aims of AES.
- There have been some positive developments. In the UK, the Enhanced Training and Information Provision (ETIP) scheme will be introduced later this year, and should greatly increase the amount of advice available to farmers. In England, the Campaign for the Farmed Environment is trying to address the imbalance in option uptake by providing better information to farmers.
- In the Netherlands, there are hundreds of farmers' co-operatives. Farmers exchange knowledge and work together. This system seems to work well, but the Netherlands are still striving to find the most effective measures. Rather than 'giving advice', it is better to think about bringing about a 'change in knowledge'.
- There seems to be a general trend in Europe to reduce the amount of advice that is freely available to farmers. We are probably not providing enough advice considering the scale of what we are asking farmers to do.

Effectiveness of AES

- There is now a large body of evidence showing the benefits of AES, although results are not yet as positive as we could wish in all areas.
- Researchers may be personally convinced that AES are the best way of achieving our aims, but we need to continue evaluating them and learning from experience.
- AES need to be more cost-effective. Even within the existing budget, there is a lot of scope to increase efficiency by targeting spending on those measures that have been shown to work.

Summary of the morning session

- It is easy to underestimate the impacts of AES by looking solely at the published scientific literature. Case studies are needed as well as large scale monitoring. There is still work to be done on collecting together the evidence we have at European or even national level.
- It is important to target schemes to specific situations and to provide adequate advice to farmers. Result-based approaches may be valuable, although not many Member States other than Germany have taken this approach.
- There is a lot of interest in landscape measures, but the results are mixed. It seems these measures are less well understood.
- Biodiversity brings a complex set of challenges. We can design schemes targeted at individual species, but even here there have been failures.
- There is a widespread problem with farms being outside the system, especially in new Member States which have large numbers of very small farms.
- There is a continuum between absolute land abandonment and a decline in management. The CAP intervention has put a limit on the decline, but will not stop it altogether. We do not yet have evidence for the extent of decline in management, but it seems certain we will continue to see micro-abandonment to some extent.

Afternoon session: delivering environmental goods and services from land management – modelling the budget

Introduction

There is currently no rational European basis for determining the budget allocation for Pillar 2. Allocations in the New Member States are derived from SAPARD, whereas the Old Member States receive allocations on a historic basis.

Researchers from three European countries presented studies which sought to estimate the scale of need for environmental goods and services from land management. These ongoing studies each present a different methodological approach.

Assessing the land and budget requirements to meet agri-environmental policy objectives in the Netherlands. Koen Overmars, *Netherland Environmental Assessment Agency*.

The presentation was introduced with the question – Is there a problem with the supply of biodiversity in the Netherlands? In agricultural areas the answer is YES.

- The research adopted EU and Netherlands policy targets as measures of demand for biodiversity as a public good. Budget requirements were based on current spend on agri-environment measures.
- A high / low value for estimating the scale of need was produced. The low value was identified by adopting a “core area” strategy for species, the high value by targeting wider areas “countrywide”.
- The study concludes that 9 – 22% of agricultural land in the Netherlands must be included in AES to meet the stated policy goals for biodiversity. This would require 10 – 35% of the current total Netherlands CAP budget.

Estimating the scale of future environmental land management requirements for the UK. John Elliott, ADAS

The presentation described a method of estimating future coverage and funding requirements for environmental land management in the UK. This is the first time such an estimate has been made, and the study highlighted many areas where further research is required.

- Figures were adjusted to take account of situations where agri-environment measures address more than one policy objective, or the geographic areas covered overlap.
- Biodiversity objectives required by far the largest area, followed by climate change mitigation and resource protection.
- The total estimated cost for the UK was about three times the current Pillar 2 allocation.

Third discussion session

Points of clarification on the UK model

- In this model, meeting biodiversity targets is much more expensive than climate change mitigation. This is partly because biodiversity management options are often

expensive. Also, climate change mitigation objectives in this model are largely addressed by measures targeted on other objectives, including biodiversity. So the method of dealing with overlaps may give undue bias to biodiversity.

- Resource protection in this study refers mainly to water quality. The study assumed that all cross-compliance measures would become regulatory, and only measures above and beyond this level would be rewarded through AES.
- This model did not consider in which geographical areas of the UK AES were applied. In reality, policy makers need to decide on land management priorities at the local scale.

Food security

- Farmers see food production as their main objective.
- If direct payments were reduced, farmers would produce the same amount of food but at a higher environmental cost.
- We need to communicate to farmers that environmental security is necessary to achieve food security.

Opinions on the future of Pillar 1 and Pillar 2.

- The current model, with Pillar 1 supporting food production and Pillar 2 supporting environmental objectives, does not help us to address the issues of food security and environmental protection in a holistic way.
- The future of environmental land management is dependent on farmers, and direct payments are necessary to keep farmers in business/to support farm income. The real question is how to distribute this money. For example should more be paid to large or small enterprises?
- Many farmers are currently ineligible for AES, for example because they have a short term tenancy agreement. If the rules governing AES became a requirement for all CAP funding, many farmers would be unable to access any CAP support. This would lead to land abandonment and dramatic changes in the landscape.

Comments on the models presented

- In the studies, a target area was set and it was assumed that payment levels remain as they are now. However, this target area may not be reached, because farmers in that area may not be eligible for AES, or because payments are not high enough to attract farmers to join AES. It might be more appropriate to assume in the model that payment levels need to increase.
- Responding to the previous point: a policy focused on biodiversity would certainly have higher spend on biodiversity measures. However, the models were developed on the basis of the broad CAP we have now.
- If we could target payments to farmers who could provide public goods at the lowest cost, we wouldn't necessarily need a larger total budget.
- The UK model highlights the need for options that address multiple policy goals. People tend to be very focused on a particular objective: we need more communication.

Budget needs for multifunctional agriculture – considerations for Germany. Ulrich Hampicke, emeritus professor, University of Greifswald.

This study attempted to calculate the cost of achieving specified conservation goals in Germany.

- 'Multifunctional' is used here to refer to agricultural land that contributes to nature conservation. Conservation action is needed for species that are in decline although

still common, and for species that are important for aesthetic reasons; not just for endangered species.

- Costs were taken from reality, looking at the various costs relevant to different situations. For example in highly-productive regions, opportunity costs are much more important than production costs and are sensitive to market conditions.
- No attempts were made to model changes in property rights. Land prices are difficult to predict and social factors are important: for example farmers are very unwilling to sell land they have inherited from their family. Market forces, political changes and technical developments all affect the value of land.
- The study concludes that €1500 million per year would be needed to meet the stated aims. Theoretically, 80% of this money is already available. However, much is wasted on measures that are ineffective, or do not go beyond GAEC. Some increase in the CAP budget would be welcome, but it seems much more important to refocus the existing funds.

Fourth discussion session

Discussion of the costs calculated in the German study

- Costs were calculated without reference to actual current payments per hectare (in contrast with the other two studies which were based on existing calculations). The study concludes €500 million is needed to preserve low-input grassland. This money is already spent on grassland management in reality, but through a variety of schemes.
- The actual payments to arable farmers are higher than the costs calculated in the study, which reflects the strength of the farming lobby in Germany.

A simplified architecture for CAP

- A possible future direction for CAP would be flat-rate payments for certain beneficial farming systems, such as the traditional systems used in Europe for many centuries. In these cases payments would therefore be calculated according to costs of inputs, deducting market income instead of income foregone.
- There is also the possibility of simplification of CAP at a higher level, for example replacing the two pillars with a single pillar that is concentrated on the delivery of environmental goods and services.
- Any simplified CAP architecture would need the flexibility to respond to local needs, so that land management specifications could be site specific.

Taking land out of arable production

- In Germany, much of the poor cropland area which would be valuable for biodiversity has been afforested or planted with energy crops. However, taking a certain proportion of land out of arable production would address both biodiversity and non-biodiversity targets.
- Studies are ongoing in Switzerland, France and UK on the benefits of taking land out of arable production.
- Studies in the UK suggest that converting 3% of arable land for conservation would not be costly. However, the relationship is non-linear: converting 5% of land would have a much higher cost.

Price volatility

- Price volatility is a problem for farmers and conservationists alike. A possible future task for agricultural policy will be to develop payment systems that damp down price fluctuations or assure a minimum level of income.

- In the UK, agricultural policy is moving away from market management. If we accept living with price fluctuations is part of being a commercial farmer, we can base payment calculations on average figures.

Opinions on the role of regulation versus incentives

- If current EU environmental policies were fully implemented, they would achieve their targets. Increasing incentives would be a better way to implement policies than imposing restrictions. We need to use the funding systems of the EU to create opportunities for land managers.
- In economics, all costs are considered to be opportunity costs: there is no differentiation. However, the distinction is meaningful in real life. We should avoid using words like compensation, and instead talk about payments for public services and rewarding good management.

The relative importance of CAP and other policies in meeting environmental policy goals.

- The EU aims to integrate environmental policy into all other policies.
- There are other policies such as the Water Framework Directive that contribute to environmental policy goals, but in many cases these do not have their own budget.
- We are entering a new era. Environment is not currently the primary objective of CAP, but this may change: Cioloş has already mentioned an increased focus on public goods.

Concluding thoughts

Questions arising from the discussions

- Taking into account price changes, how often do we need to review incentive payments to ensure they are relevant to the current situation?
- Should payments be calculated using full or opportunity costs?
- Are the current AES payment rates effective to meet policy aims?
- Some targets such as biodiversity are site specific. Others such as greenhouse gas emissions are not. How should these differences be tackled? What should be achieved through regulation?
- How much can we achieve by improvements in technology?

Concluding remarks

- It is logical to use CAP as the primary policy to address biodiversity goals: there is a clear EU competence in this issue, CAP is relatively well-funded, and agricultural land supports a large proportion of biodiversity. Other environmental issues, such as climate change mitigation and water quality, may be best addressed through market or other measures.
- There is a strong argument for giving biodiversity a high priority within the CAP objectives: it is a well-established target, underpins many other important issues and is central to the public goods debate.
- Member States need to co-operate on monitoring and evaluation. Ideally, some of the technical assistance money would be made available for co-ordination measures such as sharing monitoring data and holding regular seminars/exchanges between Member States.
- EU citizens need to understand the benefits and importance of CAP. All practitioners should aim to communicate their work to the public within their own countries.