



A Research Paper of the Cross Compliance Network

Cross Compliance: Practice, Lessons and Recommendations

Deliverable 24

By

Martin Farmer
Vicki Swales
Institute for European Environmental Policy (IEEP)

Lone Kristensen
University of Copenhagen (KU)

Heike Nitsch
Bernhard Osterburg
Federal Agricultural Research Centre (FAL)

Xavier Poux
Applications des Sciences de l'Actions (AScA)

April 2007

The Cross Compliance Network is a Specific Support Action generously supported by the Community's Sixth Framework Programme.



Sixth Framework Programme
SSPE-CT-2005-022727

About the Cross Compliance Network

The Cross Compliance Network aims to develop our understanding of environmental cross compliance. A consortium of nine universities and research institutions from a range of EU Member States is consolidating research to date, undertaking new original research, identifying future research needs and fostering a network of cross compliance stakeholders.

The Cross Compliance Network is co-ordinated by the Institute for European Environmental Policy (IEEP) and consists of the following partner institutions:

Agricultural University of Athens (AUA), Greece
Applications des Sciences de l'Actions (AScA), France
CLM Research and Advice plc. (CLM), Netherlands
Federal Agricultural Research Centre (FAL), Germany
Institute for Structural Policy (IREAS), Czech Republic
Istituto Nazionale di Economia Agraria (INEA), Italy
Lithuanian Institute for Agrarian Economics (LIAE), Lithuania
University of Copenhagen (KU), Denmark

This paper, along with all those published for this project, may be found on the project's dedicated website:

<http://www.ieep.eu/projectMiniSites/crosscompliance/index.php>

The project co-ordinator is Martin Farmer at the Institute for European Environmental Policy. He can be contacted by email at mfarmer@ieep.eu or by phone on +44 (0) 20 7340 2683.

Acknowledgements

The following persons all contributed valuable information during the drafting of this paper:

| | |
|-------------------------|---------------------------|
| David Baldock (IEEP) | Carin Rougoor (CLM) |
| Jiri Moravec (IREAS) | Deborah Scorzelli (INEA) |
| Andrea Povellato (INEA) | Gerwin Vershuur (CLM) |
| Jorgen Primdahl (KU) | George Vlahos (AUA) |
| Blandine Romain (AScA) | Romualdas Zemeckis (LIAE) |

Citation and disclaimer

This report should be quoted as follows:

Farmer, M, Swales, V, Kristensen, L, Nitsch, H and Poux, X (2007) *Cross Compliance: Practice, Lessons and Recommendations*, Deliverable D24 of the CC Network Project, SSPE-CT-2005-022727.

The views expressed in this report are those of the authors and do not represent those of the European Commission. All information was understood to be correct at the time of writing.

Table of Contents

| | | |
|----------|---|-----------|
| 1 | INTRODUCTION | 6 |
| 1.1 | Focus of the Cross Compliance Network Study..... | 6 |
| 1.2 | Methodological Approach..... | 7 |
| 1.3 | The Objectives of Cross Compliance | 8 |
| 1.4 | The Current Policy Context..... | 8 |
| 1.5 | Other Approaches to Promoting Environmentally Sustainable Agriculture 11 | |
| 2 | KEY OBSERVATIONS..... | 12 |
| 2.1 | Administrative Arrangements for Cross Compliance..... | 12 |
| 2.1.1 | Observations | 12 |
| 2.1.2 | Research Needs..... | 17 |
| 2.2 | The Farm Advisory System..... | 20 |
| 2.2.1 | Observations | 20 |
| 2.2.2 | Future Research Needs | 21 |
| 2.3 | The Potential Environmental Impact of Cross Compliance..... | 22 |
| 2.3.1 | Observations | 22 |
| 2.3.2 | Future Research Needs | 31 |
| 2.4 | The Possible Cost of Cross Compliance to Farmers..... | 34 |
| 2.4.1 | Observations | 34 |
| 2.4.2 | Future Research Needs | 37 |
| 3 | FUTURE POLICY OPTIONS FOR CROSS COMPLIANCE..... | 39 |
| 3.1 | The Background Scenario | 40 |
| 3.2 | The Policy Options..... | 41 |
| 3.2.1 | Policy Option 1 - The ‘Fine Tuned’ Approach..... | 41 |
| 3.2.2 | Policy Option 2 - The Objective Oriented and Targeted Approach..... | 44 |
| 3.2.3 | Policy Option 3 - The ‘Ecological Priority Areas’ Style approach..... | 48 |
| 3.2.4 | Policy Option 4 - The Fully Integrated Pillar I and Pillar II Approach..... | 51 |
| 3.3 | Research Needs in Relation to Future Policy Options..... | 54 |
| 4 | PRIORITY AREAS FOR FUTURE RESEARCH ON CROSS COMPLIANCE..... | 56 |
| 5 | CONCLUSIONS: FUTURE RESEARCH NEEDS FOR CROSS COMPLIANCE..... | 57 |

6 REFERENCES60

Boxes

Box 1. Types of Cost Associated with Cross Compliance.35
Box 2. Possible Types of Costs Associated with Achieving Compliance with
Mandatory Requirements.....36

Figures

Figure 1. The Relative Focus of Cross Compliance and Agri-Environment Schemes in
Affording Environmental Protection and in Promoting Environmental Enhancement.
.....29
Figure 2. Policy Option 4 - The Structure of the Potential 2013 Subsidy System.52

Tables

Table 1. The Environmental Issues on Which Cross Compliance is Likely to Impact.
.....23

Acronyms

| | |
|---------------|--|
| EEA | European Environment Agency |
| Annex III | Annex of Regulation 1782/2003 establishing SMRs. |
| Annex IV | Annex of Regulation 1782/2003 establishing GAEC. |
| Breach | A non-compliance with a control point. |
| CAP | Common Agricultural Policy |
| CCA | Competent Control Authority |
| CIFAS | Cross-compliance Indicators in the context of the Farm Advisory System; an EEA study. |
| CMO | Common Market Organisation |
| Control Point | Action to be undertaken at farm level. Control Points to be checked during controls (administrative or on-the-spot-checks) concerning the farmers' obligations. |
| EU | European Union |
| FAS | Farm Advisory System |
| GAEC | Good Agricultural and Environmental Conditions as referred to in article 5 and Annex IV of Council Regulation (EC) No 1782/2003. |
| GAEC issue | The issues as referred to in the left column of Annex IV of Council Regulation (EC) No 1782/2003. |
| GAEC standard | The standards as referred to in the right column of Annex IV of Council Regulation (EC) No 1782/2003. |
| IACS | Integrated Administration and Control System |
| NGO | Non Governmental Organisation |
| SAPS | Single Area Payment Scheme |
| SMR | Statutory Management Requirement: the provisions as derived from the application of the relevant articles of the legislations included in Annex III of Council Regulation (EC) No 1782/2003. |
| SPS | Single Payment Scheme |

1 INTRODUCTION

This is the concluding paper of the Cross Compliance Network study. The paper serves three purposes. The first is to present the key observations of the study. These observations relate to the way cross compliance has been implemented by Member States and some of the potential impacts arising from implementation. The second is to identify specific research tasks needed to support the ongoing evaluation of cross compliance and facilitate future policy design. As part of this exercise, a number of future policy options for cross compliance are outlined. Thirdly, a list of research priorities is presented and a number of comments put forward regarding the future role and design of cross compliance.

1.1 Focus of the Cross Compliance Network Study

The Cross Compliance Network study commenced in November 2005 and concluded in April 2007. The project centred on the system of cross compliance, as introduced by Regulation 1782/2003 following the Mid Term Review of the Common Agricultural Policy (CAP) in 2003. This review introduced a number of adjustments to agricultural support, within what is known as Pillar I of the CAP. One of the most substantive was the introduction of a decoupled system of farm payments. This system was to function under two headings, with the Single Payment Scheme (SPS) to operate across the EU-15 and the Single Area Payment Scheme (SAPS) across most of the new Member States. A second change was to make the receipt of this payment conditional on meeting environmental, animal health and welfare and food safety standards. This is known as cross compliance. Some of these standards are based on pre-existing items of EU legislation and are called Statutory Management Requirements (SMRs). Other standards are aimed at ensuring Good Agricultural and Environmental Condition (GAEC) and reflect the issues of soil management and the minimum maintenance of agricultural land. On-the-spot inspections take place to check all standards are respected. If they are not, a deduction can be made to the recipient's Single Payment. An objective of these changes was to promote a more market orientated and sustainable agriculture sector.

In the Cross Compliance Network study a focus was placed on the environmental aspects of cross compliance. It therefore concentrated on the five environmental SMRs (i.e. the SMRs for the Birds Directive, the Habitats Directive, the Nitrates Directive, the Sewage Sludge Directive and the Groundwater Directive) and GAEC. The key issues identified by the study are also relevant to the food safety, plant and animal health and animal welfare aspects of cross compliance. The study focused on the implementation of cross compliance in nine Member States: Czech Republic, Denmark, France, Germany, Greece, Italy, Lithuania, Netherlands and UK (England). The selection of Member States was sufficiently diverse to offer a range of insights into, and perspectives on, cross compliance. The findings are of relevance to the EU-27.

Given the relative infancy of cross compliance, an aim of the study was to collect information - where it existed - in order to develop the research and policy communities' collective knowledge of the status of implementation as well as initially consider some of the consequences arising from implementation. A more analytical

approach was also adopted to identify good practice and seek out areas for improvement. This process permitted research needs to be identified, which are summarised in this report. The study did not aim to present a definitive account of Member State implementation and resulting impacts. Rather, it provided an opportunity to reflect on the initial experiences of implementation and, through the three research seminars held for the study, presented a forum for those involved to exchange experiences.

The study examined the way in which cross compliance was implemented by national administrations, focusing primarily on the choice of specific SMRs and GAEC standards, the design of the inspection and control system and the establishment of the Farm Advisory System. The potential effects of cross compliance on the environment and land abandonment were also examined. An analysis of the possible cost to farmers of meeting the standards set under cross compliance was also conducted and consideration was given to the related role of private certification schemes in ensuring minimum standards are met. In each case, future research needs were identified in order to deepen knowledge of implementation and to enable the impacts of cross compliance to be better understood in the future.

The key issues identified by the study were the starting point for the development of four future policy options for cross compliance. These options considered the changes that could be made to the present system of cross compliance to help it better meet its objectives in the future. These options were based on an assumption that the policy and political landscape will change over the coming years and assumed that cross compliance would need to be adapted to reflect this change. Research would be needed to support the development of these options, if considered desirable by the wider policy and research community. Each option was included to encourage debate on the future of cross compliance and to act as a bridge to considering additional research needs.

1.2 Methodological Approach

A total of eleven research papers were written by experts from the Cross Compliance Network in preparation for three separate seminars. Each paper focused on a different aspect of cross compliance. Fieldwork was conducted by each partner institution and took the form of literature review and telephone interviews with key officials and stakeholders within the nine Member States included in the Network. The study also developed contacts with those leading other relevant studies and drew on the material produced. Each paper was presented at the relevant seminar alongside themed workshop sessions where stakeholders from Member State governments, Paying Agencies, farming organisations, environmental NGOs and the European Commission were given the opportunity to reflect on, scrutinise and develop the analysis presented. Each paper was subsequently revised to take account of comments and key areas of consensus, and then published on the project website¹ as part of a wider dissemination exercise that also included distributing two project bulletins to over 800 individuals.

¹ <http://www.ieep.eu/projectMiniSites/crosscompliance/index.php>

Four papers were presented at the first seminar held in Paris, France on 3 July 2006, attended by a total of 57 individuals. Six further research papers were prepared for the second project seminar, held on 14 November 2006 in Copenhagen, attended by 64 individuals. The penultimate paper synthesised the key messages from the earlier papers and developed a number of policy options to stimulate debate about the future evolution of cross compliance. The ideas developed in this paper were presented in Brussels on 26 April 2007. The 75 stakeholders who attended participated in one of four discussion groups, one per policy option. During these groups participants helped undertake a SWOT analysis of the option and identify areas for improvement. The comments received informed the further development of each policy option for presentation in this paper and identified additional future research needs.

1.3 The Objectives of Cross Compliance

The primary purpose of cross compliance is to promote more sustainable agriculture. As summarised by Swales (2006), the recitals of Regulation 1782/2003 set out three objectives. The first is to integrate basic standards for the environment, food safety, animal health and welfare and good agricultural and environmental condition in the common market organisations by linking direct aid to rules relating to agricultural land, agricultural production and activity. The use of the word ‘basic’ is noteworthy. It is apparent that cross compliance is a means of enforcing compliance with pre-existing legislation in the agriculture sector and is therefore a tool to help meet the objectives of this body of legislation. A second objective is to avoid the abandonment of agricultural land and ensure that it is maintained in good agricultural and environmental condition. Land abandonment may, alongside other drivers, arise as a result of decoupling. A third objective is to maintain the existing area of permanent pasture as it is regarded to have a positive environmental effect. Any assessment of the effectiveness of cross compliance must focus on the extent to which these objectives are being met.

More broadly, cross compliance can also be considered to be a tool to speed up Member State implementation of the various Regulations and Directives that constitute the SMRs listed in Annex III of Regulation 1782/2003. It also seeks to complement a control system founded on criminal prosecution with a more efficient sanctioning system linked to the Single Payment. Moreover, cross compliance is one approach to ‘greening the CAP’, the general aim of which is to increase the broader acceptability of making direct payments to farmers in the opinion of both the WTO, in the context of the multi-lateral trading system, and the general public, who hold concerns about the environmental damage caused by intensive agriculture.

1.4 The Current Policy Context

The system of cross compliance introduced by Regulation 1782/2003, forming part of the 2003 CAP reform, has been in operation in the EU-15 since 2005, although the full set of SMRs was not implemented until January 2007. The Member States that acceded to the EU in 2004 will need to implement the SMRs from 2009, and later still in Bulgaria and Romania, although standards for GAEC have been introduced.

Cross compliance sits within a broader policy context, including the CAP Health Check (the policy review scheduled for 2008) and the Biodiversity Action Plan, and

other EU priorities, including Better Regulation. These need to be accounted for in any deliberations about cross compliance. Relevant policy statements are summarised here.

The Commission's 2007 Review of Cross Compliance and the 2008 CAP Health Check

The European Commission is required by Article 8 of Regulation 1782/2003 to produce a report on the application of cross compliance by the end of 2007. The report COM (2007) 147 adopted by the Commission College on March 28 2007 was the first step to meeting that obligation and the subsequent proposals will need to be adopted by Council in order to introduce the necessary legislative changes. It proposed a number of technical adjustments, as follows:

- To permit Member States to not pursue minor non-compliances i.e. those that would not trigger the one per cent minimum Single Payment reduction;
- To clarify the rules concerning the one per cent control rate for on-the-spot checks;
- To increase the number of on-the-spot checks only in areas of risk;
- To provide advanced notice of on-the-spot checks;
- To clarify the timing of on-the-spot checks;
- To conduct on-the-spot checks on half of parcels rather than all parcels on the farm;
- To include a random element in the control sample;
- To improve the provision of information to farmers;
- To take account of a farmer's participation in the Farm Advisory System and membership of certification schemes when determining the risk sample.

The focus of this review is to make short-term improvements to the system of cross compliance. According to the Commission's March 2007 paper, questions about changes to the scope of cross compliance will be addressed during the CAP Health Check due to take place in 2008. Whilst it is not certain at this stage, the current set of SMRs and the GAEC framework could be reviewed as part of the Health Check. This policy review could also consider the more fundamental question of whether cross compliance is working as best it might. According to a 2004 Commission and Council Joint Declaration the Commission is in a position, whenever needed, to provide recommendations and guidelines for a better application of the cross compliance system based on the experience gained.

Better Regulation

The European Commission's activity on Better Regulation serves to identify and remove unnecessary regulatory burdens. Member States and the Commission agreed at the Spring 2007 European Council to reduce administrative burdens by 25 per cent by 2010, as set out in 2006's Strategic Review (COM (2006) 689). The subsequent Action Programme (COM 2007 (23)) states that Regulation 1782/2003 is a priority area for the further examination of administrative burden. The Commission's ambitions in this regard are not about deregulation, but 'to streamline and make less burdensome the way in which policy objectives are implemented', and thus reduce the economic impact associated with Community legislation.

Within the context of the CAP, Better Regulation is generally referred to as ‘CAP simplification’. Simplification refers to reducing red tape and making rules more transparent and easier to understand in order to reduce costs and ensure value for money, as set out in COM 2005 (509). It also means attaining existing policy objectives more effectively and streamlining administrative procedures. Whilst the Commission’s 2005 Communication does not explicitly address cross compliance, the Commission’s priorities for Better Regulation are clearly of relevance.

In analysing cross compliance from a Better Regulation perspective there are a number of key principles to keep in mind (Swales, 2006), namely that regulation should be:

- relevant – related to the issues or problems that need to be addressed and has clear objectives and purpose;
- effective – producing or capable of producing an intended effect;
- efficient – having the intended effect without wasting time, effort or expense;
- proportionate - balancing the value of the public benefits derived against the burdens and costs imposed on individuals and businesses.

These four aspects factored into the considerations of the Cross Compliance Network study as, in principal, they help determine whether cross compliance is working as best it might. Given the relative youth of the policy, there is little evidence on which to assess the correspondence between cross compliance and these four factors, but they must be borne in mind when examining the impacts arising from implementation and suggesting future research requirements.

Community Actions on Biodiversity

The Commission’s Communication on Halting the Loss of Biodiversity by 2010 (COM 2006 (216)) states that cross compliance should provide indirect benefits to biodiversity. In the accompanying Action Plan, a number of priority objectives refer to cross compliance. One of these is to ensure the effective implementation of cross compliance in ways that benefit biodiversity. Another is to consider a review of cross compliance requirements related to the preservation of biodiversity as part of the Commission’s 2007 review. The preceding Message from Malahide (Duke, 2005) set out similar objectives, and the Sixth Community Environment Action Programme set out the objective to promote the integration of biodiversity considerations into agricultural policies.

The Sixth Community Environment Action Programme

The Sixth Community Environment Action Programme, agreed in 2002, sets out priority objectives to be attained by the EU in the field of environmental policy before 2012. It reflects a joint commitment of the European Parliament, the Council and the Commission (Pallemaerts, M *et al.*, 2006). In the Commission’s mid term review of the Sixth Community Environment Action Programme in 2007 (COM(2007) 225), it is stated that

Cross compliance has proved to be effective in contributing to the integration of environmental concerns into the Common Agricultural Policy and the Commission will investigate whether this tool could be usefully extended to other policy areas, such as fisheries and transport.

The observations in this report are pertinent, particularly if it is the intention to apply cross compliance to other sectors of EU competence.

1.5 Other Approaches to Promoting Environmentally Sustainable Agriculture

Cross compliance is not the only way to promote environmentally sustainable agriculture. Whilst the current mould of cross compliance helps to enforce existing legal requirements and a small number of other basic land management standards, rural development measures in the second Pillar of the CAP also play a potentially more substantial and targeted role. These measures are provided for by Regulation 1698/2005 and part-financed by the European Agricultural Fund for Rural Development (EAFRD). In particular, the agri-environment measure and the Less Favoured Areas measure help to promote sustainable land management. But, in contrast to cross compliance, which is compulsory for all farmers claiming the Single Payment, Member States have discretion as to which measures to implement, and if implemented, these are voluntary measures that apply to fewer farmers. Environmental regulation in itself, some of which has been included in cross compliance, remains a key component in promoting environmentally sustainable agriculture.

Market-based approaches to promoting sustainable agriculture also exist. The European Commission adopted a Green Paper on the subject in March 2007 (COM (2007) 140), highlighting the roles of environmental tax reform and targeted subsidies, amongst others, as tools to achieving environmental policy objectives. Private certification schemes may also promote sustainability, as might private and public methods of farm advice.

The achievement of environmentally sustainable agriculture is therefore reliant on the dynamic interplay between the enforcement of legislation, in which cross compliance plays a role, and other measures that give farmers the scope to meet standards that exceed minimum legal requirements and thus deliver public goods.

2 KEY OBSERVATIONS

In this section, a brief summary is presented of the main findings of the Cross Compliance Network project. These findings relate to the administrative arrangements for cross compliance, the Farm Advisory System, the potential environmental impacts of cross compliance and the possible cost of cross compliance to farmers. They refer to the nine Member States included in the study. For more detailed information, you are advised to refer to the individual papers produced for the study. These papers are referenced throughout the text. For each theme a number of future research needs are also identified. These needs build on the findings of this study and take into account other relevant research in order to support the further development of cross compliance.

2.1 Administrative Arrangements for Cross Compliance

Cross compliance introduced a new control system for the inspection of standards and the application of sanctions. This has been a challenge for national authorities, but has resulted in the introduction of what is probably a more direct sanctioning system when compared to a system based solely on criminal prosecution. The farming activities of recipients of the direct payment now face greater scrutiny and farmers are more accountable for their actions. In most cases Member States sought to reduce the overall administrative burden by naming the Paying Agency as the Competent Control Authority. In other cases a number of Competent Control Authorities were named so as to take advantage of specialist knowledge, in which case control visits were co-ordinated centrally and inspection visits combined with other inspections required for statutory obligations. The overall result is a more systematic approach to the control of legal requirements than was the case without mandatory cross compliance. The information presented here is largely drawn from two Cross Compliance Network papers: Nitsch (2006) and Nitsch and Osterburg (2007).

2.1.1 Observations

Member States have taken different approaches to administering cross compliance. This section summarises the way standards were designed, the type of control procedures that were established, and the application of sanctions.

Design of Cross Compliance Standards

Member States were required to define SMRs and GAEC standards that farmers must respect in order not to receive a financial sanction in the form of a reduction to their Single Payment. The design of the GAEC standards needed to take into account the specific characteristics of the Member State and be set below the standards established for the agri-environment schemes provided for by the EU's rural development regulation (Regulation 1257/99) and its successor (Regulation 1698/2005). The choice of standards, the way they were communicated to farmers, and the resulting environmental impacts were considered by this study and are summarised in the relevant sections below.

The framework for cross compliance standards was generally set at the national or regional level, if appropriate. In nearly all cases the Ministry of Agriculture, or equivalent, was responsible for the design of cross compliance at the national level. In Germany and Italy regional authorities have a strong influence and had to approve the

proposals of central government. Co-operation between the Ministry of Agriculture and the Ministry in charge of the environment was required in many Member States, mainly for the SMRs relating to the Birds and Habitats Directives and the standards for GAEC. In all the countries examined other stakeholders, including farming and environmental lobby groups, were consulted. The choice of standards, and their relevance to environmental needs and policy objectives, is explored in section 2.3.

Control Procedures

Cross compliance demands the implementation of a systematic and comprehensive system of controls to monitor compliance. For many Member States this was a new experience, as many of the SMRs and GAEC standards had either simply not been inspected for in the past or were not done so in a systematic manner. The Member States covered by this project all managed to establish a workable control scheme in relatively little time. Cross compliance appears to have resulted in increased bureaucratic effort, and careful consideration needs to be given to whether the benefits delivered by cross compliance outweigh this effort. There is evidence to show that there is better enforcement of some mandatory standards through cross compliance because of the introduction of systematic controls, the threat of potentially high sanctions and the improved awareness of the standards among farmers.

Member States were required to set up an Integrated Administration and Control System (IACS) to record the details of the farmers and the agricultural parcels that come under the scope of the Single Payment Scheme. IACS also includes a control system for cross compliance, whereby Member States are required to nominate a Competent Control Authority to co-ordinate the selection of farmers for control and on-the-spot checks. These checks need to take place on a minimum of one per cent of farmers who receive the single payment. This control system for cross compliance was investigated in some detail by this study, including the methods used to select a sample for on-the-spot checks and the way these checks were conducted on the farm. Consideration was also given to the effectiveness and efficiency of these approaches.

Most of the Member States examined opted for a central and integrated system of risk assessment where controls for all environmental requirements are combined. The controls are co-ordinated by a national Paying Agency, although in some cases regional authorities have some responsibility. In France, for example, the regional agricultural administrations at NUTS3 level select farms for control. In certain cases, additional specialised control bodies are responsible for selecting the sample and conducting inspections for particular SMRs. For example, in England the Environment Agency (a government agency with a pollution control remit) is a Competent Control Authority responsible for three SMRs, Natural England (a government agency with a nature conservation remit) is responsible for two SMRs whilst the Rural Payments Agency, as the Paying Agency, is responsible for most of the other standards.

– Sample Selection

Member States are required to use a risk assessment to select farms and to increase the rate of on-the-spot checks in case a significant level of non-compliance is observed. Member States take various approaches to conducting the risk assessment. Criteria vary between Member States, but some examples include the size of the farm and number of fields, the number of livestock, the type of agricultural activity, the

results of controls from previous years and whether the farm is located within a Natura 2000 site. These criteria are generally given different weights, thus influencing the farms that are selected for on-the-spot checks. In the Netherlands care is taken to achieve a balanced representation of different farm types and an even regional distribution. This is to avoid selecting a disproportionate number of certain farm types which would otherwise have a higher chance of being selected, such as mixed farms or specialist livestock farms.

The systematic control of some standards is less meaningful in certain cases. The use of a strongly integrated risk analysis means that farms are selected because they present a significant risk in one respect, although they are then also controlled for all other cross compliance standards for which they might not pose a great risk of non-compliance. For example, a farm might have been selected for an on-the-spot check because some of its land falls in a Natura 2000 area. However, in the context of an integrated control the farm is also inspected for compliance with standards related to the Nitrates Directive, even if there is a very small related risk of non-compliance because the farm lies outside the Nitrate Vulnerable Zone and has a low stocking density. This example shows that a horizontal approach to defining standards and control may be inefficient.

The criteria used for risk assessment, according to the information available for this study, seem to be insufficiently targeted at environmental issues. This could be because a considerable part of the control sample is selected randomly, meaning the selection of farms is rather diffuse and untargeted. A random element, as used in many Member States, is nevertheless desirable since comparing the variation in breaches between the random and risk based samples may give an indication of the effectiveness of the environmental risk assessment in detecting breaches. Other frequently used parameters, such as farm size, may be less meaningful than environmentally explicit selection criteria. There are some exceptions. For example, in the region of Mecklenburg-Vorpommern in Germany specialised authorities provide details of certain farms for inclusion in the systematic control sample. The use of environmental criteria in the risk assessment also occurs in some of the Member States examined. For example, in England and in France the nitrogen load of catchment areas and livestock densities are considered in the selection process. The way the risk sample is constructed therefore influences the detection of breaches and has a bearing on compliance levels.

It is not clear at this stage whether the approaches used by Member States based on the rules set out in the implementing Regulation (Regulation 796/2004) adequately target the farms most at risk of not complying with a single standard. Similarly, little is known at present about whether approaches to risk analysis target farms situated in environmentally sensitive areas where non-compliance could result in more severe negative environmental impacts. The identification of best practice in this regard is limited given the project was conducted during the early stages of implementation.

– On-the-Spot Checks

The Competent Control Authority is obliged to carry out checks for cross compliance requirements on one per cent of farms receiving direct payments. If a higher control rate is required by the relevant piece of legislation, as is the case with the rules on animal identification and registration, the higher control rate applies. The way

controls were conducted in the early stages of implementation was of interest to the Cross Compliance Network Study, with particular consideration given to how compliance was checked in practice.

On-the-spot controls are often bundled together. Normally the Competent Control Authority checks all standards it is responsible for during one single visit. It is often the case that a suitable timeframe is identified in which most of the standards can be checked at once. All environmental SMRs and GAEC standards are controlled within one visit in England. This is also the case in several German regions, where for example in Baden-Württemberg the official from the Competent Control Authority may be joined by a specialist from the regional nature protection authority. In Greece, standards are controlled in a bundled manner in order to minimise the time and effort required by both controllers and farmers.

In several of the Member States examined for this study, inspectors have official checklists to complete as part of the control visit. It appears from the brief review conducted for this study that Member States have had difficulty identifying standards that can easily be checked. For example, it has proved difficult to define checklists for inspectors to use in order to verify compliance with the SMRs for the Birds Directive. Standards suitable for cross compliance control visits often need to rely on examining relevant documentation and visual controls in order to avoid extremely detailed and time consuming inspection visits. In Germany, for example, the inspection of standards established for the Nitrates Directive SMRs relies on examining documentation, whereas most GAEC standards are subject to in-field inspection. The efforts involved in conducting controls is variable across Member States and partly depends on: the control method (e.g. validating documentation, conducting in-field checks, checking all animals or fields or only a sample); the complexity of the standards being checked; the number and size of farms that need to be checked; the travel time of inspectors; and the time required to communicate results between the Competent Control Authority (of which there may be more than one, in some cases) and the Paying Agency. The animal identification SMRs are the most time consuming to check as each animal is physically checked, although checking documentation can also be time consuming if the content requires complete verification. The average time to complete a control visit is therefore widely variable, and ranges from about four hours in the Veneto region of Italy to in excess of 36 hours in England.

In many of the Member States examined the controls are shared between the Paying Agency, which acts as the Competent Control Authority, and specialist authorities. For example, a number of specialised control authorities are involved in Denmark, where the Municipalities, the Danish Plant Directorate, the Danish Forest and Nature Agency, and regional offices are all responsible for different cross compliance standards. Breaches of the cross compliance standards can also be reported by authorities responsible for specialised controls outside of the systematic cross compliance control system. In the Hesse region of Germany, for example, only 50 of the 75 non-compliances identified in 2005 resulted from the systematic controls conducted for cross compliance.

According to information collected by the European Commission (CEC, 2007a), inspections took place on 240,898 farms, or just under five per cent of farms receiving the Single Payment, in 2005. This is some way above the minimum rate of one per

cent and is largely due to the occurrence of specialised controls required by legislation for the identification and registration of cattle that take place alongside cross compliance, and, in the EU-10, due to eligibility controls being combined with those for cross compliance.

In practice, farmers who receive the Single Payment are likely to be inspected for cross compliance once every twenty years. It is worth comparing this inspection rate with those of private quality assurance or certification schemes where inspections occur more often, sometimes every year (Farmer and Swales, 2007). Whilst public and private approaches to ensuring minimum standards are met are not necessarily compatible, this divergence in inspection rates is interesting not least because cross compliance adopts a low control rate for mandatory requirements and private initiatives a high control rate for voluntary commitments. The similarities and differences between cross compliance and private certification have been explored in detail elsewhere (Farmer and Swales, 2007; JRC, 2006) suggesting that integration may be possible between the two approaches, but also highlighting the limits to any form of public-private cooperation.

According to the Commission (COM (2007) 147), around 12 per cent of farms across the EU-25 were penalised for not meeting the required standard(s). The rate is higher in the EU-15 (16.4 per cent) than in the EU-10 (6.1 per cent) as the SMRs have not yet been fully implemented in the newer Member States. In the EU-15 most breaches were made for non-compliance with the SMRs for the identification and registration of animals (71 per cent of inspected farms), GAEC (which includes many different sub-standards in most countries) (13 per cent) and the Nitrates Directive (ten per cent) (all data, COM (2007) 147). According to information gathered for this study few non-compliance incidents were recorded for the SMRs relating to the Birds and Habitats Directives. Compliance with the GAEC standards appeared to be rather high in the Member States examined.

– *Sanctions*

The EU requirements specify a standardised approach to calculating sanctions, in the form of a deduction to the Single Payment, and are based on the extent, severity and permanence of the non-compliance, as well as whether the offence is repeated within any three year period. Sanctions can be applied at a rate of between one and one hundred per cent of the Single Payment entitlement.

Some variations to this approach were noted by this study. In England, DEFRA issued a warning letter instead of a financial penalty for non-compliance in certain minor cases. This warning letter provided non-compliant farmers with a certain amount of time to rectify the situation, at which point a follow-up visit occurred to determine whether the farmer was now compliant. Whilst this is a softer approach to control, it may increase the overall administrative burden as a second control visit is needed. Matrices exist as uniform guidelines for controllers in many Member States. According to the Commission's March 2007 paper, in 2005 68 per cent of all penalties were applied at the one per cent level, 14 per cent were applied at the three per cent level and 12 per cent at the five per cent level in 2005, albeit with some variation between Member States. Cross compliance sanctions amounted to a total of €9.84m in 2005.

2.1.2 Research Needs

In the Cross Compliance Network study, some attention was given to reasoning whether the current cross compliance system is meeting its central objectives at reasonable administrative cost and effort. Questions were raised as to whether the control system is as efficient as it could be. There is evidence from this study to suggest improvements could be made to the way the control sample is identified, the way inspection visits are conducted and the way sanctions are applied. Adapting the system requires the support of further research in order to determine whether practical changes can be made to the status quo. The following areas could be addressed.

1. Increasing the effectiveness and efficiency of on-the-spot controls.

Cross compliance takes a ‘one size fits all’ approach to defining the minimum standards that need to be met on all farms receiving the single payment and funding for certain measures provided for by the European Agricultural Fund for Rural Development (EAFRD). This means some standards may be irrelevant to some farms, raising questions about the targeting of on-the-spot checks and the overall efficiency of the control system.

Detailed consideration could be given to the most appropriate way to conduct on-the-spot checks by targeting controls at (a) those standards that are relevant to the farm and (b) those standards the farm is more likely not to comply with. This requires detailed information about how risk assessments are made, the choice of relevant control indicators to determine compliance during on-the-spot checks, the timing of control visits (as it may be difficult to check compliance with certain standards at certain times of the year), and the involvement of specialised authorities. The involvement of specialised authorities at a lower administrative level would take into account their knowledge of regional conditions and might lead to a risk assessment that focuses more strongly on environmental issues. Further clarification about the relationship between cross compliance controls and controls performed independent of cross compliance by specialised authorities is needed. This might involve more exchanges between those involved.

Thought should also be given as to whether the rule set out by Article 44 of Regulation 796/2004 that requires Member States to increase the number of on-the-spot checks if a high level of non-compliance is identified is desirable. An effectively designed risk sample should mean a high number of breaches are identified. In practice, this could mean that the Competent Control Authority is likely to have to increase the rate of inspection every year. This may be administratively costly and, at one extreme, inadvertently create an incentive to weaken the risk analysis in order to identify fewer breaches and thus avoid increasing the rate of inspection.

There is a further research need to consider the total number of standards appropriate for inclusion in a quality cross compliance system. The current system includes a large number of relatively basic standards, resulting in a complex system which is likely to be administratively costly. Further research could examine the most appropriate balance between the number and depth of standards in relation to administration costs. Greater benefits could potentially be derived through fewer, administratively less burdensome standards. Further research into the precise administrative costs at Member State level is therefore required in order to determine

whether these costs are proportional to the benefits derived. More information is therefore also required on the benefits provided by cross compliance.

In terms of the overall effectiveness of cross compliance, the interactions between cross compliance controls and specialised controls should be further analysed in order to optimise the way different control systems complement one another. This issue is relevant to achieving a level playing field between Member States.

2. Determining appropriate sanctions

The scale of sanctions could be reviewed based on initial experience. At one extreme, the inspection rate and the possibility of receiving a potential sanction may not be sufficiently high to persuade farmers to comply. There is a hypothetical possibility that some farmers may choose to ignore the requirements. At the other end, minimum sanctions could also be reviewed. The official minimum sanction for any non-compliance at present is a one per cent penalty deduction from the Single Payment. Some Member States have taken a more flexible approach in the case of a minor breach by issuing farmers with a warning letter permitting a certain amount of time to rectify the observed non-compliance.

Research could be dedicated to analysing whether 'softer' approaches such as warning letters are beneficial tools to ensuring future compliance and whether the current financial sanctions are sufficiently in proportion to the nature of identified non-compliances. The different approaches to penalties and level of sanctions as tools to encourage compliance could be further evaluated.

3. Utilising non-compliance data to help evaluate the environmental impacts of cross compliance.

At present there is little information available on the severity of identified breaches, where they are occurring and the extent of any resulting environmental damage. For example, is non-compliance occurring in areas of particularly high nature value, or is non-compliance more dispersed? And are there differences between farming sectors? Given the introduction of a systematic control system that extends across the majority of farmland across the EU-27, knowledge of this kind could enable the geographic targeting of inspections to particularly environmentally vulnerable areas and provide useful state of the environment data. This may provide an opportunity to bolt-on an environmental monitoring aspect to the current system of cross compliance. The ability to monitor the state of the environment and point to any benefits delivered by cross compliance would also help policy makers make judgements as to the success of the policy from an environmental perspective, and the extent to which it is contributing to environmentally sustainable agriculture.

4. Utilising non-compliance data to help evaluate the choice of SMRs and GAEC standards that are appropriate for inclusion in the cross compliance enforcement system.

It is perhaps too early to state whether cross compliance is having the intended effect of ensuring compliance with SMRs and GAEC standards. Information on compliance levels over time will help determine this. This should take account of whether the breach rate is higher simply because non-compliance is easier to verify for some standards during an on-the-spot control. It should be expected that the level of compliance increases over time. If it does not the current system of cross compliance

may not be the most appropriate mechanism through which to enforce standards and could imply that alternative enforcement systems are required to promote compliance with certain standards. If compliance is near universal at present, this may also raise questions about the added value of cross compliance and suggest that the minimum standards set by cross compliance are too low. If this is the case, it may make it difficult to justify direct payments to farmers in the future. As a result, there is a requirement for compliance levels to be monitored over time, for the resulting trends to be analysed and for a feedback mechanism to be developed in order to refine the list of SMRs and GAEC standards included within the system of cross compliance according to the relative levels of compliance and non-compliance and the extent to which cross compliance serves to enforce these standards. Thought could also be given to whether removing standards would reduce or introduce new administrative burdens, and whether this would be welcomed by or confuse farmers. Caution is needed, however, in reducing the number of environmental standards included in cross compliance as this may weaken the baseline of farming's environmental performance across the EU.

5. Understanding farmers' behaviour in relation to cross compliance.

The response of farmers to cross compliance, and more generally new policy instruments, is not fully understood. Understanding farmers' attitudes can help shape the design of policy that is acceptable to farmers and still meets policy objectives. The reactions of farmers to cross compliance and its effect on farm management practices in seeking to meet cross compliance standards could help to review the type of standards set and the way they are implemented. Secondly, further information on the way farmers react to cross compliance in certain areas is required. The fear of cross compliance sanctions might influence the attractiveness of certain sites, such as Natura 2000 areas, for farming. This might lead to farmers not submitting Single Payment claims meaning that the land is not kept in good agricultural and environmental condition. In some cases it could persuade farmers to exit farming and, if there is no successor, land abandonment could occur. This could also have an adverse effect on the willingness of farmers to participate in voluntary programmes that involve additional management requirements. When evaluating the environmental impact and overall administrative effectiveness of cross compliance, the experiences and attitudes of farmers, perhaps segmented according to different farmer types, need to be taken into account.

6. Understanding the scope to develop synergy between cross compliance control systems and private certification schemes.

Private certification schemes offer an alternative approach to setting minimum standards and enforcing those standards through inspection systems. The potential to develop synergy between these two approaches has been discussed at Cross Compliance Network seminars and was suggested in the European Commission's March 2007 report on cross compliance. Research conducted elsewhere (Farmer and Swales, 2007) shows there is sufficient overlap in the standards set and in approaches to control to warrant further investigation of the potential for the harmonisation of standards and collaborative approaches to control. However, differences in the standards set and arguments about the mutual role and compatibility of government and private bodies in ensuring compliance with both legal standards and standards that sit outside of the regulatory framework impose severe limitations on the scope for synergy. Further research is required in order to understand the comparability of

standards and the rigour of their enforcement in order to determine which certification schemes are suitable for inclusion in the risk sample. Research could also be conducted into whether meeting certification scheme standards helps farmers to meet cross compliance standards. Member States are likely to need to exercise a selective approach in including any certification schemes in order not to undermine the quality of the risk sample or the rigour of the cross compliance control system.

2.2 The Farm Advisory System

As demonstrated by Povellato and Scorzelli (2006) in their report for this study, the EU recognised the importance of advisory services in enabling the effective integration of environmental objectives into the CAP as part of the 2003 CAP reform. The aim of the Farm Advisory System (FAS), as stated in Regulation 1782/2003, is to assist the farmer in identifying changes to farm management practices required by the SMRs and GAEC standards. The FAS must therefore cover the SMRs and GAEC standards as a minimum. Member States were required to introduce the FAS on 1 January 2007, and it is voluntary for farmers to take part in. Priority can be given to farmers who receive more than €15,000 in direct payments each year. According to the European Environment Agency (2006), the farm advisory system should provide farmers with access to all necessary information on cross compliance in order to fully comply with the SMRs and GAEC standards. The FAS is due to be reviewed by the European Commission in 2010.

The paper produced by the Cross Compliance Network was completed in August 2006 and therefore could only include initial information on Member State intentions for the FAS. The functioning of the FAS has been explored in detail by the European Environment Agency's CIFAS study (EEA, 2006) and the UK's Department for Environment, Food and Rural Affairs (DEFRA) (Wood, 2005).

2.2.1 Observations

The establishment of the FAS has been a challenge for Member States as it involves the development of entirely new systems - or the adaptation of existing systems - in order to meet the requirements of Regulation 1782/2003. According to the information collected for the Cross Compliance Network Study, a great deal of progress was made in the early stages of cross compliance with producing advisory information both in paper and electronic form.

It seems that most Member States have based the FAS on a pre-existing advisory system that utilises either a public or private body or a combination of both to deliver that advice. Advice on cross compliance is often integrated into a broader package that may also include farm business and agronomic advice. In many cases advice is delivered in a range of different ways by issuing booklets and checklists to help identify relevant standards, through internet based tools, holding seminars and farm walks to promote interest in cross compliance, and in some instances advice is provided on a one-to-one basis. A mix of delivery methods is important as particular methods will suit different farmers, therefore enabling the maximum dispersal of information. Moreover, certain standards are self-explanatory, whilst others are more demanding. In some cases farms located in certain environmentally sensitive areas

such as Nitrate Vulnerable Zones are targeted, and special attention may be given to those SMRs and GAEC standards that cause more concern for farmers. In some cases, the approaches used by the FAS mean that not all aspects of the standard are adequately covered (EEA, 2007). For example, farm advisory tools are lacking to help farmers meet the requirements of the Birds and Habitats Directives SMRs. In some Member States new advisors have been recruited and have received specific training on cross compliance. Member States look to support the cost of participating in the FAS through rural development programmes, with the farmer contributing a fixed amount.

The FAS provides an important role in supporting compliance with standards as farmers gain a better understanding of the purpose of cross compliance, a greater appreciation of the legislation and what it is trying to achieve, and understand the requirements that will be checked on their farm if they were to be inspected. The FAS appears to face certain challenges however. The CIFAS study (2006) identified that it will be potentially difficult for the FAS to target a large number of small farmers in more remote locations, largely because of the higher costs involved and difficulties in communication and information transfer. Davies and Hodge (2006) remarked that government needs to be engaged in convincing farmers about the rationale for cross compliance in order to bring about its acceptability across the entire farming population, taking into account the sentiments of certain types of farmers who are less disposed to cross compliance as a form of control. If Member States are successful in overcoming these kinds of problems and refining approaches to advice delivery, the FAS should contribute to meeting the overarching environmental objectives of the cross compliance policy.

2.2.2 Future Research Needs

The early review of the FAS conducted by this study, before actual implementation, meant it was not possible to evaluate the effectiveness of FAS design and the chosen approaches of Member States. The monitoring of the FAS and further elaboration on certain questions regarding policy design to improve the targeting of the FAS are suggested as future research needs.

7. Monitoring the effectiveness of the Farm Advisory System.

It is important to monitor the effectiveness of the FAS as it has a clear role to play in helping cross compliance to meet the objective of promoting sustainable agriculture. The upcoming review of the FAS by the Commission in 2010 will provide an opportunity to evaluate the success of the FAS. However, the determination of success requires some ongoing monitoring of the starting point (the level of farmers' understanding at the outset) and the effectiveness of different delivery methods for particular standards (the basic and more complex) and different types of farmers (such as those who are sympathetic towards meeting environmental objectives and those who are less so). This would permit the effectiveness of the FAS, in improving farmer awareness and understanding of environmental obligations, to be monitored, and where possible reviewed and improved.

8. Improving the targeting of the Farm Advisory System.

There is some evidence to suggest that the FAS may have difficulty reaching farmers on smaller holdings in more remote parts of the EU. This is possibly exacerbated by

the fact that Member States may give priority to farmers who receive more than €15,000 of direct payments each year, thus potentially excluding many smaller farms that receive less than this amount. Smaller farms with valuable landscape features (such as hedgerows or field trees) or habitats (such as semi-natural grassland) or where understanding of EU legislation is low and where advice may be particularly needed or valuable may therefore fail to benefit from the FAS. The extent to which Member States utilise this threshold and the extent to which certain farmers or farm types are then excluded from the FAS could be monitored as part of a broader review of the most efficient and effective targeting of the FAS. This review could also consider using a risk based approach to target those farms which must comply with the greatest number of standards or where this risk of non-compliance is greatest. This could potentially involve an assessment of improving the co-ordination between the control and farm advisory systems as a way to help the FAS to identify those standards that are creating the most difficulties for farmers, and thus promote the achievement of higher rates of compliance in the future.

2.3 The Potential Environmental Impact of Cross Compliance

The relationship between farming and the environment is complex. While farming has many positive impacts on the environment, adverse impacts arise from both intensification and marginalisation. Water pollution, air pollution, soil erosion and landscape homogeneity are just some of the environmental problems associated with agricultural production. Cross compliance, by focusing on specific pieces of environmental legislation such as the Nitrates Directive and including certain issues within the framework for GAEC, does not seek to address all environmental problems in the agriculture sector. Instead, it is focused on some specific issues, primarily water pollution, soil quality and the protection of biodiversity and landscape features. It is therefore important to judge the environmental effectiveness of cross compliance only in relation to its objectives and the framework available to meet these objectives (Swales, 2006). The effectiveness of cross compliance in this regard is also dependent on the effectiveness of the control and sanctioning system and the farm advisory system, as discussed elsewhere in this paper.

The particular areas of investigation for this study were the choice and design of standards, the possible impact on the environment of implementing these standards, how these standards might affect the functioning of agri-environment schemes, and the extent to which cross compliance drives land use change in interaction with the decoupled Single Payment Scheme and counteracts the process of land abandonment, where this is prone to occur. The main observations of the study on each of these areas are presented next. The information presented is largely drawn from four papers produced for the Cross Compliance Network study: Dimopoulos, Fermantzis and Vlahos, 2006; Kristensen and Primdahl, 2006; Moravec and Zemeckis, 2007; Poux and Romain, 2007; Swales, 2007.

2.3.1 Observations

The work undertaken for this study shows a large variation in the number of standards set, in particular for GAEC, and differences in the scope and level of ambition of the chosen standards. The review shows that the baseline of environmental protection afforded by cross compliance is not consistent across the EU. In this section, a

summary is given of the way GAEC standards and SMRs might impact on the environment.

Choice of standards and potential environmental impact

A review of the SMRs and GAEC standards established by the nine Member States included in this study (Cross Compliance Network, 2006a; 2006b) illustrates the environmental issues on which cross compliance should impact, as shown by Table 1. In general, cross compliance should promote farm management practices which are likely to help protect natural resources or prevent certain problems such as water pollution, from arising. In the absence of any real environmental monitoring however, it is difficult to judge if such positive impacts are actually occurring on the ground. The SMRs and GAEC standards and potential environmental effects are considered in more detail next.

Table 1. The Environmental Issues on Which Cross Compliance is Likely to Impact.

| Rules for: | Environmental Issue | | | | | | |
|------------|---------------------|------------------|---------------|-----|------|---------------|------------|
| | Water Pollution | Water Extraction | Air Pollution | GHG | Soil | Bio-diversity | Land-scape |
| SMRs | ✓ | X | X | X | X | ✓ | X |
| GAEC | ✓ | X* | X | X | ✓ | ✓ | (✓) |

- ✓ = cross compliance likely to have positive impact
- (✓) = cross compliance likely to have positive impact but limited
- X = issue not addressed by cross compliance (but may be indirect effects arising from some requirements)
- X* = issue generally not addressed by cross compliance but exceptions in a few Member States

- SMRs

Annex III of Regulation 1782/2003 lists specific articles of five pieces of environmental legislation for which SMRs must be applied. The legislation selected for inclusion in Annex III focuses on the protection of water from pollution (the Groundwater and Nitrates Directives), the protection of the environment, particularly soils (the Sewage Sludge Directive) and the conservation of wild birds, natural habitats and flora and fauna (the Birds and Habitats Directives). Water pollution and damage to soils are mainly problems associated with processes such as agricultural intensification and specialisation. The conservation of wild birds, natural habitats and flora and fauna can be affected by both agricultural intensification and specialisation on the one hand and agricultural marginalisation and land abandonment on the other. The inclusion of these five environmental Directives in Annex III suggests the EU sees cross compliance as a tool to help address some of the key environmental problems in the agriculture sector.

The choice of SMRs is dependent on Member State implementation of each respective Directive. One apparent success in the EU-15 has been the enforcement of the SMRs and, thus an improvement in the formal enforcement of the associated legislation. In cases where the transposition of the Directive into Member State legislation has been delayed, the ability of cross compliance to meet its objectives may be compromised. For example, when cross compliance came into force, NVZ

Action Programmes had still to be implemented in the majority of Italian regions. In Greece, four new Action Programmes for Nitrate Vulnerable Zones were completed in 2005 and 2006, which could partially be attributed to the need to define SMRs for cross compliance. This legislation does not have the same precedent in the EU-10 and Romania and Bulgaria as these Member States have only recently acceded to the EU, although cross compliance may come to exert a similar influence. The SMRs also need to be translated into requirements that are easily understood by farmers and can be checked during a control visit.

The implementation of the SMRs for the Nitrates Directive, the Birds Directive and the Habitats Directive were considered in a number of papers of the Cross Compliance Network (Dimopoulos, Fermantzis and Vlahos, 2006; Kristensen and Primdahl, 2006; Swales, 2007). Looking at the example of the Nitrates Directive, the standards farmers are asked to comply with are relatively harmonised across the Member States examined, albeit with some variation. The SMRs mainly relate to the respect of closed periods for manure and fertiliser application, rules for the storage of manure and storage capacity, limits on the application on nitrogen, and rules guiding the application of manures in relation to slopes and watercourses. The SMRs therefore correspond well to meeting the aims of the Nitrates Directive and should help to protect water from nitrate pollution from agricultural sources. The Nitrates Directive SMRs also appear understandable to farmers, although checking compliance in an efficient way creates some challenges as this may require in-field checks or the examination of lengthy documentation. In contrast, the implementation of SMRs for the Birds and Habitats Directives is more variable, with Member States not always implementing standards that correspond to all of the Articles listed in Annex III. Member States appear to have experienced particular difficulty setting standards for Articles 3 and 4 of the Birds Directive (this is the creation of protected areas and management plans). In particular, Greece, Italy and the Netherlands have defined few standards, which may be a reflection of the delayed transposition of the Birds Directive in these countries. With respect to the Habitats Directive, the SMRs relating to Article 6 (obligatory standards at the farm level established for special areas of conservation) are rather general and reflect a weak level of protection that has not improved following the introduction of cross compliance (Kristensen and Primdahl, 2006).

The rather superficial review of the SMRs for this study shows that the standards introduced under the framework of cross compliance generally reflect the status of implementation of the relevant Directive in each Member State. Where the implementation of the Directive is less than satisfactory, cross compliance may act as a persuasive force for Member States to define relevant standards. In other cases the status quo may simply be maintained with cross compliance neither affecting the scope or ambition of standards. Cross compliance may have raised the profile of these Directives in some Member States and for some farmers who were previously unaware of their obligations. The FAS clearly plays a role in this respect.

- GAEC standards

Annex IV of Regulation 1782/2003 lists a total of four issues and ten standards for good agricultural and environmental condition. Three of these issues relate to soils, specifically soil erosion, soil organic matter and soil structure. The fourth relates to the minimum level of maintenance of agricultural land and avoiding the deterioration

of habitats. Annex IV is focused on some specific environmental problems that arise in the agricultural sector from processes such as intensification, specialisation, marginalisation and abandonment. These standards need to apply to all agricultural land, especially land which is no longer used for production purposes. Member States are required by the Regulation to take into account the specific characteristics of their Member State or region, including soil and climatic condition, existing farming systems, land use, crop rotation, farming practices and farm structures. These standards must respect the standards previously set for Good Agricultural Practice under the rural development regulation (Regulation 1257/99) as well as those standards established for agri-environment schemes.

The GAEC framework set by Annex IV offers Member States flexibility to define nationally relevant standards. However, a review of the standards actually implemented in the nine Member States of interest to this study demonstrates that Member States have interpreted the intent of Annex IV in rather different ways. Some of the standards are reviewed briefly next, but have been investigated in more depth by other papers produced for this project (Dimopoulos, Fermantzis and Vlahos, 2006; Kristensen and Primdahl, 2006; Swales, 2007).

The exact standards that farmers need to meet vary across the EU, with many of the Member States examined addressing just some of the issues and standards in Annex IV and others all of the issues and standards. Some Member States have included standards that do not clearly relate to any of the issues and standards listed in Annex IV. Of the four Annex IV issues, soil erosion is relatively well covered, whilst the issues of soil organic matter and soil structure are less comprehensively covered. Perhaps the largest number of standards has been set for the fourth Annex IV issue, minimum level of maintenance, although again the coverage of specific standards is variable. For example, some of the Member States examined do not have standards for retaining landscape features. In many cases, the GAEC standards are founded on pre-existing items of national legislation, and only in very few instances were completely new standards introduced. Certain standards may have multiple environmental benefits. For example, the crop rotation requirement in Germany can improve soil fertility, provide benefits to biodiversity and be positive for landscape aesthetics.

Certain Member States such as Germany and the UK (England) implemented a relatively large number of standards, some of them more demanding than others. For example, farmers in England are required to complete a Soil Protection Review in order to identify and respond to soil problems on the farm. In Germany, arable farmers must put in place a crop rotation, a standard that was not implemented in many other Member States. Few Member States have introduced a standard for minimum livestock stocking rates. Stocking densities, previously, were more normally associated with the agri-environment and LFA measures. Greece provides one notable exception, where there is a blanket minimum stocking density of 0.2 LU/ha. To provide environmental benefits however, stocking rates need to account for local conditions and traditional grazing practice (e.g. Beaufoy *et al*, 1994). The standard therefore might not be relevant to the horizontal approach used in cross compliance, and it is unclear in the case of Greece whether the standard is appropriate to maintaining the conservation interest of semi-natural pastures by deterring under- and over-grazing. The introduction of the standard in this country may be a response

to projected declines in livestock numbers following the introduction of partial decoupling and concerns of potential land abandonment.

In other cases, Member States have developed additional GAEC standards which do not readily correspond to the specified Annex IV issues. For example, in the UK (England) farmers must not cultivate or apply applications within 2m of the centre of a hedge or within 1m of a watercourse. In France, there are additional standards regarding the use of water. There are also examples of national level standards being weakened at the regional level. In Italy, the regional authorities are able to derogate from the requirements set nationally. There are also derogations available for certain standards in some Member States. For example, the 2m margin requirement in England does not apply to fields smaller than 2ha.

The minimum level of environmental protection offered by cross compliance GAEC across the EU therefore fluctuates according to the number and scope of the standards adopted by Member States. Member States can exercise considerable discretion over the GAEC standards they choose to implement as there is no formal requirement to identify major environmental pressures and to justify the inclusion or exclusion of corresponding GAEC standards. The Commission appears to provide no guidance to help Member States formulate appropriate standards, and little clarification of the relative importance of the agricultural and environmental components of GAEC (Kristensen and Primdahl, 2006). The political dimension to implementing the new policy also played a role, with Member States needing to implement the legislation, and take account of both pre-existing standards in agri-environment schemes and stakeholder concerns (Dimopoulos, Fermantzis and Vlahos, 2006). The resulting application of GAEC is therefore somewhat uneven, leaving it unclear as to whether Member States are using GAEC to address prevailing environmental concerns or simply pay heed to the legislation. Although GAEC should contribute to achieving a range of environmental objectives, it is not clear whether GAEC is being used to its full potential.

-Permanent Pasture

The rules governing the conversion of permanent pasture were not an explicit focus of this study, although the GAEC standards for its protection were considered (Cross Compliance Network, 2006b). The rules governing the maintenance of the ratio of permanent pasture mean that Member States are obliged to ensure that the total area of permanent pasture does not drop below 90 per cent of a 2003 reference level in the case of the EU-15, or a 2004 reference level in the case of the EU-10. According to the preamble of Regulation 1782/2003, the inclusion of this rule is reasoned on the grounds that permanent pasture 'has a positive environmental effect.' The related GAEC standards generally refer to the need to maintain the reference level of permanent pasture, although GAEC standards for avoiding the encroachment of unwanted vegetation act to ensure its maintenance by requiring scrub to be removed.

The rules for permanent pasture, as with the GAEC standards, appear to be poorly targeted at maintaining environmentally important permanent pasture. For example, semi-natural pastures are likely to be of higher biodiversity value, but the rules on conversion and the related GAEC standards are not designed in a way that allows this value to be safeguarded. The reference defined at Member State level might allow the loss of high nature value grassland in one place (e.g. wetlands in flood plains) to be

apparently compensated by fertilised permanent grassland elsewhere. In other cases, natural succession and afforestation may, in certain circumstances, have a positive environmental effect, but this is not permitted under cross compliance rules.

The rules may have variable effects in relation to bio-energy crops. The rules mean that large areas of permanent pasture cannot be converted for use by bio-energy crops. This may be positive for the environment, for example by limiting nitrate pollution through reduced fertiliser usage and minimising the impact on biodiversity by maintaining the general habitat structure. Permanent grasslands also offer a high carbon storage capacity, part of which is lost if converted to arable use.

- Evaluating the Environmental Impacts Further

The environmental impacts arising from the cross compliance SMRs and GAEC standards are, in line with the aim of the legislation to introduce basic standards, likely to be fairly minimal. The standards focus on avoiding any harm to the environment, although in some cases the chosen standards have the potential to deliver positive environmental outcomes. In this respect, cross compliance does contribute to environmentally sustainable agriculture. However, given that cross compliance for the most part reinforces pre-existing legislation, it is unlikely to deliver any additional benefits to the environment. Rather, any benefits will stem from improving compliance with pre-existing legislation among those farmers claiming the Single Payment where this was less than satisfactory before the introduction of cross compliance. Elsewhere, Juntti (2006) has argued that the likelihood of achieving significant environmental improvements with cross compliance is low. This is explained in relation to an apparent misfit between the aspirations set out by the 2003 CAP reform to simultaneously liberalise the agricultural sector, secure high international competitiveness and enhance environmental standards. These multiple aims, Juntti argues, limit the capacity of cross compliance to properly secure environmental objectives.

The design of cross compliance limits its potential impact. Adjustments to its design could open up opportunities for cross compliance to deliver other benefits in addition to those achieved through enhancing levels of compliance. The ideas presented here are further developed by the policy options in section 3. Potential adjustments could involve redefining the rules for permanent pasture in order to target ecologically valuable pasture. There may also be scope to expand or shorten the list of Annex III SMRs, also explored in the policy options section. In particular there has been interest in the potential to further protect water resources through cross compliance, either by including the Water Framework Directive in Annex III or by introducing additional water quality standards in Annex IV (Muessner *et al.*, 2006). In addition, Member States could be asked to justify the choice of GAEC standards by relating these to identified environmental pressures. There could also be a requirement for Member States to systematically monitor the environmental impacts that can be attributed to cross compliance, allowing an assessment to be made of the extent to which cross compliance contributes to environmentally sustainable agriculture. Some Member States have established their own monitoring activity, an example of which is the CAP Observatory established by Defra in England (Dwyer *et al.*, 2004).

The relationship between cross compliance standards and agri-environment schemes
According to Regulation 1782/2003, the GAEC standards need to be set below those established for the agri-environment schemes provided for by the EU's previous rural development regulation (Regulation 1257/99) and its successor, the European Agricultural Fund for Rural Development (EAFRD) (Regulation 1698/2005). A dividing line is thus placed between cross compliance, on the one hand, and agri-environment schemes on the other. The two approaches can, however, provide a complementary approach to land management that aims to deliver environmental goals. The two are considered together here in order to speculate how their potential for providing an integrated and streamlined approach to agricultural land management can be maximised.

A review of the content of Member State cross compliance standards and agri-environment scheme options (Kristensen and Primdahl, 2006) suggests that the introduction of cross compliance may alter the minimum standards set for agri-environment schemes. In particular, Member State design of GAEC may lower or raise the dividing line between cross compliance and agri-environment schemes. This then alters the dynamic between what a farmer is obliged to do in order to receive their full Single Payment, and what the farmer volunteers to do in order to receive a compensation payment for participating in an agri-environment scheme.

The nature of this dividing line is characterised by Figure 1. It shows the respective focus of cross compliance and agri-environment schemes and where the two might converge. It also shows that the dividing line between environmental protection, the maintenance of environmental state and the provision of environmental enhancement is somewhat fluid. The focus of cross compliance standards is on ensuring environmental protection and to a more limited extent, the maintenance of environmental state, mainly through restrictive actions, such as those provided for by legislation. GAEC however provides the opportunity to introduce standards that require more positive action. The focus of agri-environment schemes is to a limited extent also focused on the maintenance of the environmental state, but primarily seeks to promote positive actions in order to provide environmental enhancement. In practice, this may mean that if a Member State uses GAEC to promote positive actions, the design of the national agri-environment scheme may need to be altered to take account of this.

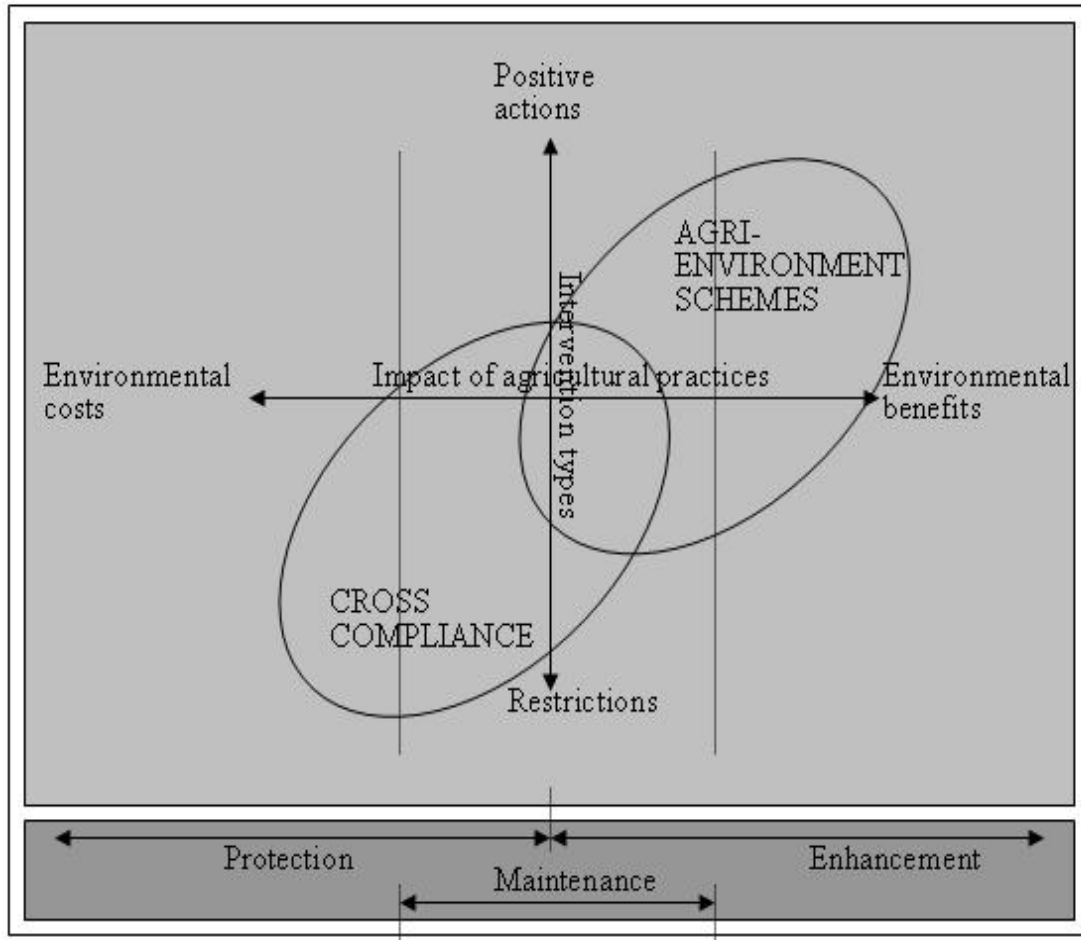


Figure 1. The Relative Focus of Cross Compliance and Agri-Environment Schemes in Affording Environmental Protection and in Promoting Environmental Enhancement.

Source: Kristensen and Primdahl, 2006.

The initial comparison conducted for this study suggests that in some cases cross compliance deals with issues that have traditionally been the preserve of agri-environment schemes. Some substantial overlaps exist between the two approaches for requirements aimed at reducing nitrogen pollution from agriculture. Some overlaps also exist for the protection of permanent grassland, although the standards are complementary and fit the mutual roles of cross compliance and agri-environment. The cross compliance requirements for permanent grassland are, in most of the countries examined by this study, minimum requirements. More demanding requirements are left to agri-environment schemes. There are several examples of GAEC standards that require the farmer to undertake some form of active management of landscape features, which may previously have been considered to fall under the scope of agri-environment schemes.

There may be both positive and negative impacts arising from this changing relationship between cross compliance and agri-environment schemes. In some Member States, voluntary standards which previously formed part of agri-environment schemes have been removed and farmers must now meet these compulsory standards as part of cross compliance. The positive effect is that it may

free up resources for agri-environment schemes allowing such schemes to focus more on environmental enhancement. The negative effect may be that it reduces the attractiveness of agri-environment schemes to farmers and affects uptake levels. The extent to which the two approaches are complementary and maximise the environmental benefits that can be delivered by farmers therefore requires further careful consideration.

Cross compliance as a driver of land use change

A consideration of the environmental impact of cross compliance needs to be placed in the context of the other elements of the 2003 CAP reform. Decoupling, in particular, goes some way to influencing land management decisions. These decisions may alter land use which may in turn relieve or create environmental pressures. The analysis conducted for this study considered the respective weight of decoupling and cross compliance for their impact on farming systems. The study also examined the potential for cross compliance to mediate the prospect of land abandonment, given that this is one of the objectives of the policy.

According to the analysis conducted for this study (Poux and Romain, 2007), cross compliance can be considered of secondary influence to decoupling. Decoupling and the Single Payment are likely to have a potential effect on commodity prices and markets and provide the primary stimulus behind farm management decisions. Cross compliance is interpreted here as a second order policy designed to prevent the undesirable effects that might arise from the primary driver, decoupling. This position is substantiated by the fact that cross compliance was not considered in the various modelling exercises undertaken to anticipate the likely impacts of the 2003 reform on agricultural markets. The analysis made here makes a preliminary attempt to gauge the varying influence of decoupling and cross compliance. To do this, the first order impacts on land use that might arise from decoupling need to be considered and then be overlain by the impacts that might result from cross compliance. These considerations are largely hypothetical given that the implementation of the reform was at a relatively early stage at the time of writing.

It might be expected that decoupling will result in production continuing to be concentrated in the most productive regions where yields will be maximised within the constraints imposed by legislation. Other regions may adapt production to meet market needs, although gains in yield may be expected to be somewhat limited. The enlargement of farms could also be anticipated. The trends observed in the past are likely to remain the same, with cereals and other crops being produced on the best arable land, and livestock production dominant in regions with high natural grass productivity. Specialised farms continue to gain in dominance at the expense of farms operating a mixed system. These mixed systems, alongside marginal grazing systems, are likely to be most vulnerable.

The question posed by the analysis is the extent to which cross compliance may modify these trends. The cross compliance rules (i.e. the SMRs and GAEC standards) do not affect all farm types in the same way. In particular the SMRs probably pose greater constraints on livestock farms, especially if the SMRs for animal identification and registration and animal welfare are taken into account. It is more difficult to draw a general conclusion about the influence of GAEC standards because the design of

GAEC varies between each Member State. The rules governing the conversion of permanent pasture should limit a widespread change from grass based livestock production to arable production where this might be economically desirable, so long as these rules are applied at the local level and trade off between regions is not allowed.

The short analysis entered into in this study shows the complexity of the processes that need to be taken into account when considering farming systems. The analysis to date is purely indicative and could be developed further depending on the way each Member State has implemented decoupling and cross compliance. This could make it possible to distinguish the likely impact of decoupling and cross compliance on different farming systems and the concurrent suitability of cross compliance to respond to the continued trends of intensification on one hand and marginalisation on the other.

There is some uncertainty at present as to how cross compliance will influence more extensive systems in marginal farming areas. Land abandonment is a threat to some areas where full decoupling has been introduced, although other drivers are also implicated in land abandonment. The GAEC framework is intended to help prevent land abandonment. However, in the medium to long term it is unclear how GAEC will be able to balance the influence of market drivers. This issue is paramount for high nature value systems often associated with marginal farming areas (EEA, 2004). The intervention of other policy measures is therefore important. The Less Favoured Area measure and agri-environment payments in particular have a role to play alongside GAEC standards in maintaining the desirability to farm more marginal, high nature value, areas.

The study examined the extent to which GAEC standards in a selection of Member States might mitigate the trend towards land abandonment (Moravec and Zemeckis, 2007). Each of the nine countries examined applies GAEC standards which require the minimum maintenance of agricultural land. The standards range from requirements to cut vegetation every year (e.g. Germany) to keeping land free of scrub and trees older than five years (e.g. Denmark). This type of GAEC standard may have a role to play in preventing land abandonment and keeping land in a condition from which it can easily be brought back into full agricultural use. It does not however require any regular active management such as grazing which may be important for maintaining the area's nature value. Some SMRs, such as those set for the Nitrates Directive, may encourage farmers to continue to manage non-productive grasslands in order to have a sufficiently large area on which to spread manure. There is a contrasting view that the weight of regulation imposed by cross compliance may contribute to land abandonment. If legal requirements are considered too demanding, especially on marginal land, farmers may take the decision to stop farming. This is likely to be the exception rather than the rule, and cross compliance is unlikely to be the decisive factor in the land abandonment issue, although it may have an influence in some cases.

2.3.2 *Future Research Needs*

Within the Cross Compliance Network study, attention was given to the effectiveness of cross compliance in achieving its central goal of promoting sustainable agriculture.

The research needs presented here feed from the analysis conducted for this study. Knowledge gaps have been identified. The research needs outlined below are generally targeted at improving our understanding of the environmental impact of cross compliance. They also suggest the need to identify appropriate approaches to establishing whether cross compliance can better respond to environmental priorities.

9. Understanding whether cross compliance responds to identified environmental priorities.

Given that GAEC, in particular, is a framework that Member States can interpret with some flexibility², it is not clear whether the obligations placed on farmers are designed to address the most pressing environmental issues. In particular, it is unclear whether GAEC is being used to its full potential by Member States. Member States may not have taken full account of the scope offered by Annex IV and the requirement set out by Article 5 of Regulation 1782/2003 to take into account the specific characteristics of the areas concerned in defining GAEC standards. In addition, it is apparent that compliance with a SMR does not necessarily equate to compliance with the underlying Directive or Regulation. This is dependent on the way in which the Member State has set verifiable standards for the SMR, which may or may not correspond to all the requirements set out by the Regulation or Directive. Weaknesses in Member State transposition of the relevant EU legislation may also weaken the strength of the standards that can be imposed on farmers through cross compliance. Further understanding of the match between environmental needs and the extent to which cross compliance addresses these needs is required. This could form the basis for considering the need to introduce a provision for Member States to justify the SMR and GAEC obligations they impose on farmers.

10. Critically reviewing the permanent pasture rules.

The suitability of the permanent pasture rules requires critical review. Recommendations should be put forward, based on sound research of the impact of the current permanent pasture rules on land use and the resulting environmental impacts, as to how the rules could be updated in order to ensure that the environmental interest of ecologically valuable permanent pasture is safeguarded. The role of the permanent pasture rules on restricting the available area for biofuel production, and the environmental implications of this, also requires consideration.

11. Monitoring the environmental impact of cross compliance.

There is no legal requirement for Member States to monitor the environmental impacts resulting from the implementation of cross compliance standards. It is therefore difficult to judge whether the central objective of cross compliance – sustainable agriculture – is being met. This is partly due to the lack of a coherent definition of sustainable agriculture. There is a need to reach an acceptable definition of this term, including its economic, social and environmental connotations. Farm level monitoring of the impacts of SMRs, GAEC and permanent pasture rules could improve knowledge in this respect, as would linking monitoring of compliance rates over time and linking this with state of the environment data. Thought could be given to designing a suitable EU framework to collect and monitor data in a co-ordinated

² There are differing views as to whether GAEC is a framework from which Member States can choose which of the four issues and ten standards in Annex IV to address, or whether Member States must establish obligations for all issues and standards included in Annex IV.

way. Member States could be required to design a national monitoring framework. Developing such frameworks requires consideration of the objectives of cross compliance, the design of standards, data availability and additional data needs. This research need may be addressed by the Sixth Framework Programme Cross Compliance Assessment Tool (C-CAT) study³ as well as any national level activity already in place (e.g. as with the Defra CAP Observatory). The information gathered could also be used to review the content of both Annex III and Annex IV as certain Regulations and Directives and GAEC standards are likely to be more suited to the system of cross compliance than others.

12. Determining the relative impacts of decoupling and cross compliance on the environment.

The environmental impacts of cross compliance need to be considered in the wider context of the 2003 CAP reform. Decoupling is likely to be the primary driver of land use, which in turn will create or relieve environmental pressures. The impact of cross compliance may be of secondary importance, although it may act as a safeguard to ensure that there are appropriate standards in place to limit some of the negative consequences of either intensification (e.g. by maintaining the area of permanent pasture) or extensification (e.g. undermanagement leading to succession of scrub, plants and trees). Further understanding will, in particular, be required about the protective role of cross compliance if and when full decoupling is in operation in all Member States. At present many Member States operate a partially decoupled Single Payment Scheme, although the CAP Health Check is expected to consider mandatory full decoupling.

13. Understanding how cross compliance has different environmental impacts on different farm types.

Not all farming systems are affected by cross compliance to the same extent. Notably, specialised crop systems (i.e. with no livestock) need to comply with fewer SMRs due to the nature of the Directives and Regulations included in Annex III. Also the requirements of the Nitrates Directive SMRs vary according to the farming system and its location. The potential environmental impact of SMRs and GAEC standards according to farm type is rather complicated to anticipate due to the large number of standards and the variation in standards across Member States.

14. Understanding the cross compliance/agri-environment scheme dynamic.

Member States have designed or updated agri-environment schemes for the 2007-2013 rural development programming period. This provided the first opportunity for Member States to revise the content of agri-environment schemes to take account of the standards set for cross compliance. Given that funding for rural development is limited, the introduction of more ambitious cross compliance standards that require some form of active management on the part of the farmer may change the baseline requirements of agri-environment schemes. Whilst this is a largely hypothetical argument at the time of writing, the potential effects, as suggested above, could be explored further through an examination of approaches to agri-environment scheme design in the new rural development programmes for the 2007-2013 period. The

³ C-CAT will evaluate the impact of cross compliance on land use, soil, water, air, climate, biodiversity, landscape, food safety, animal welfare and health. Further information is available from the project website: <http://www.ccat.nl/>

synergies between the two approaches in attempting to deliver a sophisticated approach to environmental land management could also be explored further.

2.4 The Possible Cost of Cross Compliance to Farmers

The Cross Compliance Network study also considered the possible cost to farmers that might be created by cross compliance, and to speculate what these costs might mean for competitiveness. The particular focus was the cost of complying with the SMRs and GAEC standards.

Given that mandatory cross compliance is a new requirement it might firstly be assumed that it results in additional costs that the farmer would not need to otherwise meet. Secondly, it might also be assumed that since precise cross compliance requirements differ between Member States, the costs involved are equally variable and give some farmers in some Member States a competitive advantage. It is argued here that it is largely erroneous to attribute new and additional costs to meeting cross compliance SMRs and GAEC standards. This is because cross compliance is a tool to enforce compliance with pre-existing legislation and does not, largely, introduce new requirements and hence new costs that farmers did not have to previously meet. It is noted that cross compliance may adjust the overall administrative burden faced by farmers and this may impose some additional costs. The considerations presented here need to be placed in the wider policy context, whereby the costs incurred may be judged as acceptable in order to meet defined policy objectives (McInnes, 2007).

2.4.1 Observations

In most cases the cost of complying with the SMRs and GAEC standards cannot be attributed to cross compliance. All of the SMRs as well as the majority of GAEC standards are items of pre-existing legislation and therefore any costs that arise are those that need to be met in order to comply with this body of pre-existing legislation. This is legislation that farmers need to comply with and meet the associated costs of irrespective of the presence of cross compliance. The only case when cost can be attributed to cross compliance is if a Member State introduced a GAEC standard that was not a mandatory requirement prior to the introduction of cross compliance. The review conducted for this study shows that there are very few examples of this kind of standard being introduced with cross compliance, and therefore any new and additional costs that can be attributed to cross compliance are the exception rather than the rule.

Three different types of compliance costs were identified by the paper prepared for this study (Farmer, 2007), as shown in Box 1.

| |
|--|
| <p>Category I (a): If the requirement is based on an item of legislation that pre-existed cross compliance and the farm is non-compliant with the requirement, then the farmer must make the necessary investments in order to achieve compliance. This is <i>a cost of meeting pre-existing legislation</i>. In the case of SMRs, this is the cost of meeting the EU Regulation or Directive as transposed into national legislation (for example, the Nitrates Directive). With GAEC, this is the cost of meeting the underlying national legislation (for example, the Hedgerow Regulations 1997 in England).</p> |
|--|

Category I (b): Instead, it may be argued that some of the Category I (a) costs may have been *induced* by cross compliance because the farmer may only now be seeking compliance as a result of the threat of a sanction that accompanies receipt of the Single Payment (Jongeneel *et al.*, 2006). Cross compliance provides the incentive to achieve full compliance with pre-existing legal requirements, but the costs that arise are still those of meeting these legal requirements and not of cross compliance.

Category II: If the requirement is not based on a piece of legislation that pre-existed cross compliance, and the farmer is not compliant with the requirement, then the requirement results in *an additional, new cost that is attributable to cross compliance*. These requirements are likely to be GAEC standards that may or may not be part of the farmer's usual farming practices. Examples include the GAEC standard to create a buffer strip on three per cent of UAA in France and the GAEC standard to create and follow a soil protection review in England.

Box 1. Types of Cost Associated with Cross Compliance.

It can be expected that most of the costs associated with cross compliance fall into the first two categories above. This is because Member States have, in the main, based the SMRs and GAEC standards on pre-existing items of legislation. Many farmers are likely to have become compliant with these SMRs and GAEC standards sometime in the past, before the introduction of cross compliance. They have therefore already made the necessary investments required to achieve compliance with the relevant legislation. In some cases, there may be continuing costs to ensure compliance (e.g. maintenance of a slurry store built to ensure compliance with the Nitrates Directive) in addition to one-off establishment costs (e.g. building the slurry store). These costs can be characterised as investment costs and production related costs, as shown in Box 2.

As a tool to enforce compliance with pre-existing mandatory requirements, cross compliance may result in farmers meeting costs now that they should have met in the past, before the introduction of cross compliance. This is the second cost category (I b) identified above. In any case, the associated costs are those of meeting the pre-existing legislation. It may be expected that very few cross compliance requirements fit within the third category (II). These standards are likely to be GAEC standards, as Member States had the freedom to design nationally applicable GAEC standards within the framework of Annex IV of Regulation 1782/2003. Unlike the SMRs, the standards in Annex IV are not based on EU legislation, but may be based on national legislation (e.g. the GAEC standard on water abstraction in France) or may be entirely new standards, depending on the extent to which Member States have pre-existing national legislation for soil erosion, soil organic matter, soil structure and minimum maintenance and whether this legislation is included in the national implementation of GAEC. The associated costs attributable to new standards are expected to be minimal. This is because Member States were extremely cautious about introducing onerous cross compliance requirements that would dramatically alter farm management practices or incur substantial costs. In any case, the size of the Single Payment received by farmers is generally larger than any compliance costs (see Christensen and Rygnestad, 2000).

Other costs, aside from those that may arise in becoming compliant with the SMRs and GAEC standards, are described as administration costs and non-compliance costs

in Box 2. Administration costs may stem, for example, from the process of becoming familiar with the cross compliance standards and in facilitating on-the-spot checks. If the farm is selected for an on-the-spot check by the Competent Control Authority, the farmer may have to spend a certain amount of time preparing for the inspection and accompanying the inspector as the checks are carried out. However, as no more than five per cent of farms claiming the Single Payment were inspected for cross compliance in 2005, and only one per cent need to be checked according to Regulation 1782/2003, only a minimal number of farmers encounter this administrative burden and the associated cost.

| |
|--|
| <p><i>Investment costs</i></p> <ul style="list-style-type: none"> • Costs associated with the need to purchase new equipment, for example manure storage facilities. <p><i>Production related costs</i></p> <ul style="list-style-type: none"> • Costs arising from a necessary change in production practices that may result in a reduced yield. <p><i>Administration costs</i></p> <ul style="list-style-type: none"> • The time needed to become familiar with the SMRs and GAEC standards, perhaps as described in cross compliance guidance material produced by national administrations. • The time needed to complete any related documentation, for example a management plan, or to apply for a licence. • The time involved in record keeping. • The time taken up with facilitating cross compliance inspections. <p><i>Non-compliance costs</i></p> <ul style="list-style-type: none"> • The loss of part or all of the Single Payment. • The cost of achieving compliance (which may include all of the above costs). • The loss of accreditation where non-compliance must be reported to a certification body, if the farm is certified. |
|--|

Box 2. Possible Types of Costs Associated with Achieving Compliance with Mandatory Requirements.

The classification described here contrasts somewhat with the perceived cost and administrative burdens of cross compliance. McInnes (2007) highlights two reasons why this may be the case. Firstly, in some cases the threat of sanctions for non-compliance may make certain activities feel more burdensome to farmers. Secondly, newer regulations are perceived to be the most burdensome because the farmer is more familiar with older regulations. It seems that presenting largely existing requirements, albeit in a new framework, as is the case with cross compliance, means some farmers may require a similar amount of time to achieve familiarisation as they would with an entirely new piece of legislation.

A relatively unsophisticated indicator of the proportion of farmers that may incur costs now or in the future is the current level of compliance with each particular SMR or GAEC standard. This data collected for this study indicates that where compliance is less than one hundred per cent, some farmers in some countries continue to face costs in order to achieve compliance with some of the SMRs and GAEC standards. Compliance levels are generally high, according to the results of these inspections, although the Nitrates Directive SMRs appear to have resulted in the greatest number

of breaches. In this case, the costs must be attributed to the Nitrates Directive and not cross compliance. Estimates of compliance levels in these and other Member States have also been provided in Jongeneel *et al* (2006).

Competition Effects

The new and additional costs associated with cross compliance at the farm level are just some of the many considerations that need to be made when making any assertions about the impact of cross compliance on competitiveness. The task of assessing the relative competitiveness of a farm, a sector or a Member State is immensely difficult, not least because the various costs need to be aggregated, and the precise contribution of cross compliance to these costs disaggregated. A brief indication of the likely impact was undertaken by this study.

Within the EU's common market, cross compliance should help to ensure that internal competitiveness is more consistent as all farms become compliant with legal requirements. However, it is evident that cross compliance has not been introduced in a standardised way between Member States, with the number of standards, the work entailed in meeting the standards, and to a lesser extent, compliance levels, varying quite considerably between different Member States. This may provide some farmers in some Member States with a competitive advantage, albeit one that is considerably shaped by the level of Member State transposition of the underlying legislation which make up the SMRs. In other instances farmers that are fully compliant may also enjoy a competitive advantage as they have already made the necessary investments. Others may delay making the necessary investments until costs come down, risk cross compliance sanctions but temporarily benefit from a competitive advantage. Beyond cross compliance, there is a long list of other factors which affect competitiveness. These factors include the quality of the agricultural land, climate and geographical location, the costs of inputs, wages and land rent and human capital. In a decoupled market the price of different commodities and market stability will also have an effect. The impact of cross compliance on both internal competitiveness, within the EU, and on external competitiveness, with third countries, is considered further by another Sixth Framework Programme study (Jongeneel, 2006).

2.4.2 Future Research Needs

This study has suggested what kind of costs might be associated with cross compliance SMRs and GAEC standards. There are further research needs, but these are largely being addressed by other studies. It is suggested that the results of these studies are consolidated and taken into account before future research needs on this subject are considered further. These studies are summarised in the following paragraph.

The Sixth Framework Programme project called 'Facilitating the CAP Reform: Compliance and Competitiveness of European Agriculture' is looking at the impact of cross compliance on specific commodity sectors and attempts to quantify the arising costs and compare these costs with the cost of complying with equivalent legislation in three non-EU countries⁴. This study, to date, has collected information on the

⁴ Further information on this project can be found on the project's website: <http://www.cross-compliance-fp6.eu/>

number of standards, whether they are entirely new with cross compliance, and variations in the applicability of requirements between different sectors (Jongeneel *et al*, 2006). A methodology to model competition effects has been developed using the GTAP model. DG Agriculture is funding a project, due to finish in August 2007, on the administrative burdens arising from CAP related measures, including cross compliance. This study identifies the relevant cost parameters in five Member States in order to assess the overall administrative cost for the year 2006. Defra (McInnes, 2007) has completed a piece of work on the administrative burdens in the agricultural sector arising from regulation. The Single Payment Scheme, including cross compliance requirements, is regarded as burdensome by farmers in the six Member States examined. Reading guidance and keeping records are seen as the burdensome activities for cross compliance, although the perception of burden was regarded as high in relation to the actual time spent on the activity.

3 FUTURE POLICY OPTIONS FOR CROSS COMPLIANCE

The Cross Compliance Network's review of the implementation of cross compliance, and its initial or possible impacts, shows that cross compliance is working towards meeting its objectives. However, it is evident that these objectives may not be met in a wholly satisfactory way. In this section, some alternative policy measures are discussed, in part to outline where improvements to the present system could be made, but also to build on the benefits already being delivered by the system of cross compliance. These benefits include an improvement in the baseline level of environmental protection delivered by farmers across the EU.

The primary objective of cross compliance, as explained in section 1.3, is to promote more sustainable agriculture. Other objectives are to integrate basic standards for the environment, food safety, animal health and welfare and good agricultural and environmental condition into the common market organisations (CMOs); to avoid the abandonment of agricultural land and ensure that it is maintained in good agricultural and environmental condition, and; to maintain the existing area of permanent pasture. The shortcomings of cross compliance, as reflected in section 2, show that in terms of the integration of basic standards into the CMOs, the number and strength of standards varies somewhat between Member States, indicating that there is likely to be an inconsistent minimum level of environmental protection across the EU's farmed area. The standards established for GAEC may not be suitable for addressing the most pressing environmental concerns in a Member State or region, and it seems evident that the requirement to take account of differing regional characteristics has not been comprehensively observed by Member States. The rules for permanent pasture are also criticised for failing to differentiate between those pastures that are ecologically valuable, and those that are not. Questions were also raised about the suitability of the control system and the targeting of the Farm Advisory System.

These policy options are designed to address some of these shortcomings and may enable the objectives of cross compliance to be met more effectively in the future. The policy options also attempt to take account of a policy and political context that is likely to change over the coming years, and the fact that cross compliance is likely to come under pressure to respond to shifting objectives. A possible background scenario is sketched out in section 3.1. The options presented are by no means intended to be read as solutions to any problems that may exist with cross compliance. Rather, they provide an opportunity to consider the relative strengths and weaknesses of different approaches to meeting the objectives set for the current system of cross compliance. They also highlight the need for further research to support the continued development of cross compliance in response to new and evolving priorities.

The four policy options are:

1. The 'fine tuned' approach.
2. The objective oriented and targeted approach.
3. The 'Ecological Priority Areas' style approach.
4. The fully integrated Pillar I and Pillar II approach.

Each option presents an increasing shift away from the current system of cross compliance. Option 1 presents a series of mostly pragmatic technical adjustments.

The other three options present alternative approaches that might more effectively meet the original objectives of cross compliance but involve a more radical rethink of the purpose and justification of making direct payments to farmers.

3.1 The Background Scenario

An examination of these options needs to consider the policy and political circumstances in which they might be implemented. It is feasible that Option 1 may contain suitable proposals that should be explored as part of the Commission's review of cross compliance in 2007 or in the 2008 CAP Health Check. The other options should be debated now, but their implementation is not likely to be feasible until more far-reaching discussions about the CAP are entered into.

In order to position options 2, 3 and 4, we suggest that the timeframe might be 2013-2020, and make a number of assumptions about the circumstances that might apply then:

- The 2007 Commission review of cross compliance and the CAP Health Check in 2008 introduce minor technical revisions to cross compliance but do not alter its scope or fundamental objectives. The Health Check reaches conclusions on the future of modulation, the capping of direct payments, set aside, dairy quotas and the possible future co-financing of the CAP. A case is built by some Member States and NGOs for a fundamental reform of the CAP in the near future.
- The EU budget review in 2009 concludes that the total CAP budget needs to decrease for the 2013–2020 financing period. This places downward pressure on the Pillar I budget and also on funding for rural development. The 2002 'Brussels Ceiling' that froze Pillar I spending no longer applies after 2013 and net-contributors to the EU budget may push for smaller EU and CAP budgets. The possible accession of further Candidate Countries adds further pressure to the budget.
- The EU's deadline to halt the decline of biodiversity by 2010 is missed. A new and binding target is set.
- Assuming no agreement is reached in 2007, the WTO's Doha Development Round re-opens following the election of a new US President and the taking up of office of a new Commission College in 2009. Pressure from the developing countries and renewed conviction in the multi-lateral trading system by the key players leads to an agreement that places an obligation on the EU and USA to substantially reduce domestic support payments to farmers and ensure that market measures do not distort trade.
- The Kyoto Protocol's 2012 target to reduce greenhouse gas emissions by at least five per cent compared with 1990 is missed. The EU signs up to a post-Kyoto agreement.
- Renewed consideration is given to the future of rural development measures and funding ahead of the conclusion of the current set of Rural Development Programmes in 2013. A case is made to ensure that sufficient EU funding is dedicated to meeting the needs of rural policy.
- The Commission reinforces its commitment to the CAP, including further simplification and greater transparency, reducing administrative burdens and further integrating environmental concerns into the policy.

- The Single Payment continues to be the main method of providing farmers with financial support although there is considerable debate as to whether this payment is justified. All CMO payments are fully integrated into the Single Payment Scheme and are fully decoupled from production. The compulsory rate of modulation is as high as twenty per cent and voluntary modulation is abolished.

3.2 The Policy Options

The four policy options are described in turn below. For each option an overview of the proposed approach is presented, potential improvements to the 2003 system of cross compliance suggested, and implications for national administrations and farmers discussed.

3.2.1 Policy Option 1 - The 'Fine Tuned' Approach.

Overview

The 'Fine Tuned' approach⁵ suggests a number of technical changes that can be made in the short term to improve the effectiveness of the present control system for cross compliance. It is founded on an assumption that the administrative efforts involved in enforcing mandatory cross compliance standards can be better justified if the targeting of on-the-spot checks is improved and existing specialised control systems (these are controls that take place outside of the cross compliance system) are strengthened. In this approach, the control system would predominantly target farms considered more likely not to comply with cross compliance standards (hereafter referred to as 'high risk farms'), especially where the failure to respect these standards would result in the most severe environmental impacts. The remainder of the system of cross compliance as introduced by the 2003 CAP reform, including the list of SMRs and the GAEC framework, remains unchanged. The key changes are as follows:

- Inspections are targeted at those standards that are relevant to the farm. Farms are selected for on-the-spot checks from several different control samples. These control samples are composed by dividing the SMRs and GAEC standards into appropriate risk groups (e.g. by grouping the SMRs for the Nitrates and Groundwater Directives and the SMRs for the Birds and Habitats Directives into two sub-groups) in order to select farms where the consequences of non-compliance would be most severe. Even if one control authority is responsible for more than one risk group, it will only control the farm for the SMR(s) or GAEC standard(s) it has been selected for. This approach would result in controls being less bundled than they are now (i.e. currently and in most cases all farms are checked for all standards); however, it would enable high-risk farms in relation to different standards to be targeted in a more systematic way. The overall control rate for cross compliance could increase, although the control rate per controlled standard should not.
- The relationship between existing specialised controls and cross compliance controls is improved. The aim is, firstly, to reinforce enforcement efforts that

⁵ This approach has been developed by Heike Nitsch and Bernhard Osterburg, Research Associates at the Federal Agricultural Research Centre, Germany.

occur outside of cross compliance on-the-spot checks, and secondly, to avoid the prospect of farmers being controlled twice, once for compliance with the legislation and again for cross compliance. The control rates and results of specialised controls are therefore accounted for as part of the cross compliance control system so long as these controls fulfil certain requirements (e.g. farms are chosen through risk-assessment and an inspection occurs for all standards in question). All breaches relevant to cross compliance that are detected as part of a specialised control are followed-up in the framework of the cross compliance control system.

- Farms that meet defined standards through membership of a certification or quality assurance scheme are considered of lower risk. Certification schemes are audited by the EU or Member State to ensure that these schemes include rigorously enforced standards that closely match those set in the national framework of cross compliance.
- The rate of inspection is only increased in the following year if a higher than expected number of breaches is identified by the random sample. The rule will not apply to the risk sample as a well designed risk sample should identify farms where breaches are most likely to occur. This removes the incentive to weaken the risk analysis in order to identify fewer breaches and thus avoid increasing the rate of inspection in the following year. The sampling process must therefore contain a random element.
- Greater proportionality between the nature of a breach and the penalty is achieved by introducing a new minimum penalty. This could take the form of a warning letter in the case of defined minor breaches, providing the non-compliant farmer with a certain amount of time to rectify the breach. The breach will still be taken into account in case it is repeated in the future.
- The amount recouped by applying penalty deductions to the Single Payment is kept within the Member State and is used to finance the FAS or technical assistance measures in the EAFRD.
- Advice is more targeted as the FAS is given access to information on those standards that create the most difficulties for farmers. Advice is tailored to the most problematic standards or where it is most needed (e.g. by sector or by location). This helps to bolster the acceptability of cross compliance to farmers.

In many Member States only minor adaptations to the current system would be necessary. It is, at least, dependant on the number of competent control authorities in the Member State. Some of the points described above have already been applied by some Member States. Some adaptations of current EU prescriptions for control and sanctioning would be required.

A final and perhaps more radical option for this approach would be to remove SMRs from Annex III that do not suit the current system of cross compliance. This could include removing SMRs where compliance is near universal over time, thereby removing an administrative overhead. For these SMRs, cross compliance could be considered to have met the objective of improving compliance. It could also mean removing SMRs where non-compliance remains extremely high over time and where technical and organisational limitations play a role. In such cases an alternative, dedicated control system may be more appropriate. In this case cross compliance could be considered not to work and an alternative approach is needed.

Potential improvements offered by this policy option compared to the current cross compliance system

Under the current system of cross compliance many Member States operate a highly integrated risk analysis and bundled on-the-spot controls. This means that whilst a variety of standards are covered, farms are controlled for requirements which have not led to their selection and for which they might not present a significant risk of non-compliance. Applying several different risk groups, as suggested by this approach, enables the better targeting of farms in relation to specific cross compliance standards for which the farm might pose a more significant risk of non-compliance. The suggestion to take account of existing specialised controls would reduce the incentive to replace these controls with cross compliance controls. These specialised controls may have been more targeted than those conducted for cross compliance and should remain in place. This acts to strengthen pre-existing, more ambitious control systems, and avoids the prospect of double controls. The requirement not to increase the control rate removes an administrative burden. The suggestion to retain penalties in the Member State may also present a funding opportunity for the FAS. A duty to follow up those breaches detected outside of the cross compliance control system is highly relevant in creating a level playing field between Member States. The option to compare non-compliances identified in the random sample with those identified in the risk sample allows an analysis to be made of the quality of the risk assessment as well as to observe trends in compliance with standards. A more targeted system of advice allows problem areas to be addressed and would help to improve compliance levels over time. Overall, this approach seeks to make better use of administrative resources by improving the targeting of controls and removes the need to operate parallel and possibly duplicitous control systems.

Potential drawbacks

The suggested approach requires a greater level of coordination between control bodies. In addition, the overall control rate would be higher although actual on-the-spot checks would be less comprehensive. An individual farm may also face a greater number of controls, but through coordination between different CCAs and using the same database to conduct the risk assessment, the accumulation of several on-the-spot checks on the same farm in one year by different authorities can be avoided. If a future increase to control rates for certain groups of standards is based only on farms chosen randomly, this could pose statistical problems since this control group is much smaller than the number of all farms being controlled. This could be addressed by merging data of several years and, in the case of regional implementation of cross compliance, from several regions. The approval of eligible certification and quality assurance schemes by a Member State would require an additional effort and could be controversial as certain certification schemes would be privileged above others and may gain a commercial advantage as a result. Finally, if penalties are used to fund technical assistance, the funds available could decrease as compliance increases. The size of this fund is unlikely to be predictable and care would therefore have to be taken that budget problems do not arise.

Implications for actors

- Farmers

Farmers would not have to change their farm management as cross compliance requirements remain the same as in the 2003 system. Controls would be less bundled

meaning that there is a higher control rate. However, the inspections require less time as fewer standards need to be inspected. Farmers may also prefer a system whereby high-risk farms are selected for controls and controls are targeted at those standards that are relevant to their farm. As any additional controls would reduce the acceptability of the system to farmers, double controls should be avoided as far as possible. The introduction of an initial first warning instead of a financial sanction for defined minor breaches and the inclusion of membership of a certification scheme in determining the risk sample are also likely to be welcomed by farmers.

- National administrations

With less bundled controls, the additional effort for national administrations would mainly be connected to coordination, travel time (which can be a considerable effort in remote areas) and in conducting separate risk assessments. The higher effort can be justified by a likely increase in effectiveness (i.e. detecting more breaches by targeting high risk farms). Taking account of the results of specialised controls for the control rate for cross compliance could reduce the effort needed for cross compliance controls. The removal of SMRs from Annex III could reduce administrative burdens. The follow-up of breaches relevant to cross compliance detected outside of the cross compliance control system is likely to result in additional administrative effort, as would determining which certification schemes should be taken account of in the risk sample. Changes would especially be required for those Member States that operate centralised controls through the paying agency and aim at a minimum overall control rate. Most other aspects of this policy option should be acceptable to all Member States, including the option to exercise greater flexibility over control rates, for penalties to be kept within the Member State and used to fund the FAS, and to base an increase in control rate only on the results of the random sample. Taking into account the results of specialised controls should not cause major objections. The possibility to account for certified farms in the risk sample would depend on the standards covered by existing certification schemes, their reliability and their control systems, and should be voluntary for Member States.

Potential benefits for the environment and in promoting sustainable agriculture

Although this option focuses on the administrative arrangements for cross compliance there are likely to be some benefits for the environment if cross compliance standards are more effectively enforced. The higher threat of inspection should help to increase compliance levels. In addition, a more targeted system may be seen to be more just by farmers, thus leading to greater acceptance of cross compliance and the co-operation of farmers in seeking to ensure its objectives are met.

3.2.2 Policy Option 2 - The Objective Oriented and Targeted Approach.

Overview

Whilst an advantage of the system of cross compliance introduced with the 2003 CAP reform is that it applies to a large number of farms and over a wide area of land, it imposes standards on farms and in areas irrespective of whether certain environmental problems occur there or not. This approach is dismantled under this option⁶ and

⁶ This approach has been developed by Vicki Swales, Senior Fellow at the Institute for European Environmental Policy, UK.

replaced by a system whereby the standards implemented more clearly correspond to identified environmental needs. The principle characteristics of this approach are as follows:

- At the EU level, a strategic document similar to the EU Strategic Guidelines for Rural Development (Council Decision 2006/144/EC) would be prepared clarifying the objectives of cross compliance. This document would give a clear definition of sustainable agriculture and identify the major environmental concerns to be addressed by cross compliance.
- Based on this EU strategy, Member States would prepare a national plan to be approved by the Commission setting out their objectives for cross compliance at national and regional level, as appropriate. Member States would identify and quantify the key environmental problems to be addressed and describe and justify the use of SMRs and GAEC standards to address these problems. Similarly Member States would need to justify why particular environmental problems are not addressed through cross compliance and why certain SMRs or GAEC standards are omitted. This process acts to streamline cross compliance. The relationship between standards set for cross compliance and the standards set for agri-environment schemes are also explained in this document. There is greater accountability and improved justification of the specific standards farmers are required to meet.
- This plan also includes a description of the permanent pasture rules, control procedures and the provision of information and advice. Member States would be required to demonstrate how they would expect their approach to implementation to meet the established environmental objectives.
- The list of environmental legislation included in Annex III remains as now although this could be expanded to include legislation such as the Water Framework Directive and Soil Framework Directive (if adopted). As currently, all farmers would be required to comply with SMRs or face a reduction to the Single Payment. However, Member States need not apply all Annex III legislation through this version of cross compliance if they can demonstrate that the legislation is already adequately enforced by other means and compliance levels are high. The national strategic plan would provide justification as to why some Annex III legislation was not included in the national cross compliance system.
- Annex IV is expanded to provide a much broader environmental framework within which Member States would define appropriate standards for GAEC. Issues covered by Annex IV include: the protection of soil (although this could be removed if it duplicates a possible Soil Framework Directive SMR), air and water resources; reduction in greenhouse gas emissions; the protection of biodiversity and the preservation of landscapes.
- Control and inspection systems take an entirely risk-based approach. Farms selected for inspection would be those located in areas where there are known environmental problems or where agricultural activity presents certain threats to the environment e.g. water catchments vulnerable to nitrate pollution, Natura 2000 areas, areas with highly erodible soils etc. Data on the severity and location of breaches is made available in order to better target inspections and advice.
- When defining standards for GAEC that can be verified during an on-the-spot-check (called control points), Member States would be expected to consider what actions are needed and where in order to address specific environmental problems. In other words, control points would be targeted at specific problems on a more targeted geographic basis. As a result, control points may differ across the

Member State territory and from farm to farm depending on what environmental problems or risks were most prevalent. This would require a more sophisticated administrative system that could inform farmers of their obligations, possibly linked to their Single Payment application.

- Member States are obliged to undertake a programme of monitoring and evaluation of the environmental impact of cross compliance. This involves establishing the baseline situation and selecting indicators to demonstrate whether cross compliance standards are relieving environmental pressures. The details of this programme would need to be specified in the national plan.
- The Farm Advisory System would be targeted in the first instance at those farmers where environmental problems or threats are the greatest rather than on the basis of the size of Single Payment receipts.

Potential improvements offered by this policy option compared to the current cross compliance system

Currently, the purpose of cross compliance is rather generally defined. It is not clear why, from the large body of EU legislation, only certain pieces of legislation are included in Annex III or why only certain issues and standards are addressed by Annex IV. An EU strategy setting out the specific aims and objectives of cross compliance would be beneficial in order to better understand the overall intent of the policy. At Member State level, it is not always clear why cross compliance has been implemented in the way it has and what Member States hope to achieve. For example, the selection of GAEC control points is not very transparent and it is difficult to get a clear picture of the risk assessment criteria used by Member States for controls. Approaches to information and advice are highly variable across Member States and it is difficult for anyone outside of the administrations to understand why certain approaches have been adopted. A national strategic plan would bring much greater clarity in relation to the aims, objectives and operation of cross compliance.

The process of preparing a national plan can also yield benefits. If prepared in consultation, it can be a means of engaging stakeholders and helping to reach agreement on national objectives and priorities. Stakeholder engagement may also lead to wider overall support for the policy while the plan itself can be a means of communicating a policy to those it will affect.

In its current guise, the cross compliance system appears to be a widely applied measure that seeks to ensure farm level compliance with basic standards, some of which are environmental. The main advantage of such a system is presumably that it applies to a large number of farms and over a wide area of land. But in doing so, the system imposes standards on farms and in areas, irrespective of whether certain environmental problems occur there or not. This policy option proposes a more targeted approach to cross compliance; environmental obligations would be more targeted to certain areas and/or individual farms in order to address the main environmental problems or risks encountered there. Christensen and Rygnestad (2000) have previously argued that environmental cross compliance policies should be geographically differentiated according to where different types of environmental management are needed.

A programming or planned approach could also yield benefits in terms of monitoring and evaluation of the policy since it establishes clear policy objectives which can be

linked to targets. In turn, monitoring can be undertaken to establish if such objectives and targets are being met. This would require baseline data to be collated. Plans can also be subject to revisions, allowing the policy to adapt and evolve over time to changing circumstances. There is already a precedent for such a planning approach in relation to Pillar II of the CAP, through rural development programming.

Cross compliance forms part of the EU's commitment to integrate environmental concerns into agricultural policy. But it has also been argued that applying conditions to CAP Pillar I payments helps to justify those payments by linking them to the provision of public goods which includes the protection of natural resources. This policy option has the potential to enhance the environmental benefits of cross compliance. In doing so, it could strengthen the case for continued Pillar I payments in future, should those payments come under attack. Different stakeholders are likely to have different views as to whether this is desirable or not. In contrast, if Pillar I payments were to be reduced in future, due to WTO and budgetary pressures, the effectiveness and efficiency of attaching conditions to payments would be weakened. One of the strengths of the current system is the control and sanctioning mechanism that encourages farmers to comply rather than risk the loss of what can be substantial payments. Reduced payments could reduce the incentive to comply.

Potential drawbacks

One of the most significant drawbacks of this policy option is the administrative burden, for the Member States, of having to develop a national plan and, for the European Commission, of having to produce an EU strategy and approve national plans. Experience with rural development programmes has shown this to be a complicated and time consuming process which has often resulted in backlogs and delays in expenditure.

Implications for actors

- Farmers

The main advantages for farmers arise from the targeting of GAEC obligations, inspections and information/advice. Farmers would have a better understanding of what specific problems need to be addressed on their farm as a result of being presented with targeted GAEC requirements rather than being presented with a general list of obligations which may or may not be relevant to their situation. The advisory system would be set up in such a way as to help farmers comply with those specific obligations. Farm inspections would be more focused and potentially less time consuming. The targeting of obligations to specific farms, or areas, may be seen as disadvantageous to those farmers who have to comply and when obligations result in increased on-farm costs. Such a situation could have competitiveness effects between farmers although it can also be argued that placing obligations on farmers in areas where environmental problems, such as soil erosion, already occur, but not on farmers in other areas, is simply an extension of the polluter-pays-principle.

- National administrations

From the perspective of national administrations, the system proposed by this policy option is potentially more onerous and complex than the current system. In the first instance, Member States face the administrative burden of preparing the national strategic plan and developing or accessing the data sources needed to introduce a

more targeted system. For example, this system requires an understanding of the spatial distribution of problems such as water pollution, soil erosion and declines in biodiversity, and an ability to accurately identify environmental risk. If obligations vary from farm to farm or area to area, Member States would need IT and administrative systems able to cope with communicating these differing obligations to farmers and inspecting accordingly. There may be some benefits and cost savings if fewer inspections are needed due to a more targeted approach being adopted.

This policy option also has implications for the European Commission. The main advantage is that the Commission would have a much clearer picture of the different approaches to the implementation of cross compliance in the Member States as a result of the requirement for Member States to write a national strategic plan. Commission approval of such plans could add a significant administrative burden. The production of an EU strategy is also an additional administrative burden. If successful, this policy option might have greater positive environmental impacts than the current system, thereby contributing to sustainable development objectives.

Potential benefits for the environment and in promoting sustainable agriculture

In theory, a more objective orientated and targeted approach should yield environmental benefits compared to the current system. The efforts of both the administrations and farmers would be focused on resolving specific environmental problems or preventing problems from arising in defined areas. The broader framework of Annex IV would also allow Member States to address issues such as water extraction and climate change which fall outside the current framework but are important issues in relation to environmentally sustainable agriculture.

3.2.3 Policy Option 3 - The 'Ecological Priority Areas' Style approach.

Overview

This option⁷ is based on the assumption that cross compliance, as defined in Regulation 1782/2003, was the first step taken to improve the implementation and respect of the legislation included in Annex III. This option assumes that good progress was made over the 2005-2013 period with implementing the Annex III Regulations and Directives at Member State level, with improving farmer awareness of their obligations, and with achieving high levels of compliance. Member States are presented with the opportunity to remove legislation from the national set of SMRs if the Regulation or Directive has been satisfactorily implemented and compliance levels are high. This approach is also suggested under Policy Option 1. It is assumed here that is more logical and efficient to enforce legislation through specialised controls and a system of fines. This option therefore does not remove the need to comply with legislation.

This option clearly separates regulation from a refocused form of cross compliance. The removal of SMRs creates space for cross compliance to focus on the delivery of goals not provided for by regulation, such as the provision of environmental enhancement. In particular this approach presents an option to maintain the

⁷ This option has been developed by Xavier Poux and Blandine Romain at ASca, France.

environmental benefits delivered by set-aside which, according to the background scenario, is likely to be abolished. The Annex IV GAEC framework is also removed following a recognition that the relevance, effectiveness and control efficiency of a system such as cross compliance is weakened if the number of standards that need to be enforced are too numerous.

Based on the examples of cross compliance in Switzerland in the late 1990s and on some GAEC standards introduced by Member States in 2005, cross compliance would concentrate on simple, efficient, verifiable, socially recognised standards that allow direct payments to farmers to be justified by the EU and Member States. This leads to the adoption of standards that do not focus on the prevention of risk, as with most current cross compliance standards, but that have a positive orientation and make a visible contribution to biodiversity conservation and improvements to water quality and reduced soil erosion.

In this approach, cross compliance has three components. The first is to maintain the area of permanent pasture, the second is to undertake a minimum level of land maintenance in order to avoid scrub development and potentially, land abandonment, and the third is the newly introduced Ecological Priority Area (EPA) standard. This standard requires the farmer to remove a proportion of land from agricultural production in order to create an Ecological Priority Area.

The principle characteristics of this approach are as follows:

- Farmers would be required to leave a minimum of five per cent of the utilised agricultural area (UAA) uncultivated for a minimum of six years.
- In areas with significant environmental constraints (such as Nitrate Vulnerable Zones or areas with soil erosion problems) farmers would be required to leave at least ten per cent of UAA uncultivated.
- EPAs need to be positioned alongside watercourses or be used to form ecological corridors in order to maximise their environmental impact. Linear features are favoured as greater environmental protection can be delivered with minimum land use.
- Farmers have a certain level of discretion as to which land to place into an EPA, but are assisted by certified ecological advisors in order to place their EPA in the most suitable place. The EPA and its management forms part of an agreed plan signed by the advisor. To support this, maps are drawn up at a 1:25,000 scale.
- Farmers would be required to undertake basic environmental management on the EPA. The farmer would be required, in accordance with nationally or regionally defined options, to put in place an appropriate environmental cover, undertake minimum management on grassland, protect hedgerows, develop riparian buffers and where appropriate develop native woodland (in which case such land would remain eligible for the Single Payment).
- The EPA approach is closely linked to agri-environment schemes as the EPA approach under cross compliance only requires a basic level of management. Agri-environment payments are available to improve the management of and/or the size of the EPA. For those farmers with a high proportion of environmentally important habitats or features, agri-environment options exist to ensure land that falls outside of the EPA is managed appropriately.

Potential improvements offered by this policy option compared to the current cross compliance system

This approach responds to a number of weaknesses identified in the system of cross compliance that was introduced in 2003. The option focuses on fewer standards. The abundance of standards in the present system is regarded to stem from unclear objectives and deliver weak results. It also addresses the current ambiguity between regulation, on the one hand, and the secondary inclusion of regulation within the framework of cross compliance. This avoids the risk of confusion between compliance with SMRs and compliance with regulations. This option also circumvents the risk created by cross compliance of introducing a low baseline of standards across the EU whereby Member States avoid putting in place higher standards than other Member States. Instead, it acts to simplify standards, make controls more visible, simple, efficient and verifiable (perhaps through GIS and geo-referenced IACS to locate parcels), and homogenises the ambition of standards between Member States. It also addresses the possible low acceptance among farmers of cross compliance since the standards, as presently defined, are not synonymous with environmental results. This permits the better justification of payments in the long term and allows the value added of cross compliance to be observed. This option also means the potential environmental risks that might arise following the likely abolition of set-aside are reduced.

Potential drawbacks

This policy option has a number of weaknesses, some of which are summarised here. This approach may prove unpopular with farmers because a certain amount of land cannot be cultivated. This may imply new costs even if farmers already meet an obligation of ten per cent set aside. There may be difficulties associated with designing the location of the EPAs and the menu of management principles at the regional level. This option also raises questions about the relationship between cross compliance and agri-environment schemes, with agri-environment schemes concentrating on farms which ideally require more than ten per cent of the UAA to be placed into an EPA. The removal of Annex IV may have some negative environmental consequences in those Member States which have taken an ambitious and positive approach to the implementation of GAEC standards.

Implications for actors

- Farmers

As a whole, this policy option does not change the set of regulatory requirements that farmers need to respect, as the legislation in Annex III still needs to be respected, albeit outside of the system of cross compliance. The bureaucratic burden is likely to be less as mandatory standards are not incorporated in the CAP payments procedure. In addition, the EPA does not represent a burden in administrative terms, but a change for some farming systems. The prevention of cultivating some land previously assigned to set-aside can be interpreted as a constraint for those farmers who foresaw the abolition of set-aside. Nevertheless, compared to the present rate of set-aside, EPAs do not represent a major change to the overall magnitude of constraint.

- National administrations

The implications for national administrations are similar to the ones discussed for farmers. On the one hand, this option stands on an efficient implementation of

legislation, with better targeted control systems. A system of fines is politically more acceptable than the withdrawal of payments to farmers. With regards to the EPAs, controls are expected to be easier than those for the present system of cross compliance because remote sensing can be used.

Potential benefits for the environment and in promoting sustainable agriculture

This policy option concentrates on achieving environmental benefits through cross compliance, leaving the prevention of negative impacts, in the field of environment, but also for public health and animal welfare, to regulation. From a more technical point of view, this approach is expected to provide clear and measurable effects, notably by introducing landscape features where they have been removed in the past. Thus, its main benefit is expected to be in the regions that are only marginally addressed by the 2003 system of cross compliance. These regions, include, most notably the specialised crops systems which are hardly concerned by most of the SMRs and some of the GAEC standards. The EPA approach attempts to reduce the environmental impacts of more intensive operations and promote greater environmental benefits on less intensive units. It also attempts to achieve environmental goals in a way that cannot currently be achieved through regulation. Another major potential benefit is to prevent the risk of habitat destruction and intensification that may occur as a result of the demand for biofuel production. There are also likely to be benefits to biodiversity. A similar approach has some precedence in Switzerland where 13 per cent of UAA is now interspersed with low input Ecological Compensation Areas. A comparison of two studies (Herzog *et al*, 2005 and Knop *et al*, 2006) shows that the benefits for biodiversity have, to date, been mixed.

3.2.4 Policy Option 4 - The Fully Integrated Pillar I and Pillar II Approach.

Overview

This is the most far reaching option to be presented⁸. It is an approach that has some precedence (e.g. Buckwell, 1997) and involves a more fundamental rethink of the reasons for providing payments to farmers. Such an approach can be explored in any number of ways, and the approach presented here is by no means definitive. This approach focuses mostly on the delivery of environmental benefits. However the approach requires further elaboration given that Pillar II addresses not only the environmental aspects of rural policy, but also the economic and social needs of rural areas. The particular characteristics of this approach could be:

- Pillar I and Pillar II of the CAP are integrated to create a single EU fund for rural areas. Farmers receive a single payment for undertaking obligatory pro-active environmental management and must complete an environmental management plan.
- The 2003 system of cross compliance is abolished as compliance with mandatory requirements is universal. Specialised control bodies continue to undertake standalone inspections. Farmers can still be prosecuted and excluded from the payment scheme if mandatory rules are disrespected. The farmer may need to

⁸ This option has been developed by Lone Kristensen, Associate Professor and Jørgen Primdahl, Professor, at the University of Copenhagen, Denmark.

prove their compliance with mandatory requirements through some type of certification scheme.

- The environmental management scheme would be tiered with farmers receiving greater sums for undertaking progressively more demanding management options. The Tier 1 payment would be a flat rate payment, whereas the payment rate for Tiers 2 and 3 would depend on the specific activities undertaken and be in line with the labour and capital costs required to undertake the desired management. National administrations would need to define the minimum actions to be included at each level. By undertaking recommended management options linked to the specific needs of the area at the Tier 1 level, farmers may qualify to enter Tier 2. The Tier 3 level may be reserved for farmers in areas designated through the Habitats Directive or who farm in other priority areas. Management options may be chosen from a local adapted menu reflecting the specific conditions and needs of the local landscape. The structure of this scheme is described in Figure 2, where Z indicates the income support and X the environmental support. In order to enter the support system, both for the income support and the environmental support, the requirements included in the environmental baseline need to be fulfilled.
- Farmers below certain income thresholds in areas where the continuation of traditional farming practices is important for the environment will be entitled to receive an additional income support (if this is permitted by WTO rules) or an environmental support payment at a higher rate. These are likely to be farmers in marginal farming areas (probably livestock) such as those found in the current Less Favoured Areas. Criteria defining the farmers eligible for the income support are decided on the EU level. A small part of budget, perhaps less than 25 per cent, is allocated for income support. Income support can only be received if the farmer also participates in the environmental support scheme.

| | <i>Tier 1</i> | <i>Tier 2</i> | <i>Tier 3</i> |
|---|---------------|--------------------|------------------------------------|
| <i>Environmental support</i> | X | X+X ₁ | X+X ₁ +X ₂ |
| <i>Environmental and Income support</i> | Z+X | Z+X+X ₁ | Z+X+X ₁ +X ₂ |

Figure 2.
Policy Option 4 - The Structure of the Potential 2013 Subsidy System.

- A precondition of receiving support is that the farmer must complete an environmental management plan. This plan details the particular environmental pressures on the farm through a simple environmental impact assessment. The plan should, as a minimum, include a record of the state of all landscape features on the farm, a record of resource consumption and a review of the impact of farming activities on soils, water, air, habitats, energy and water use. The plan should also include a list of the specific legislation that the farmer has to comply with. The entire holding would be covered, including both agricultural and forestry land. Farmers may require training in order to be able to complete the plan or the plan may be produced with the help of authorised consultancy firms.
- The environmental management plan includes an action plan. The farmer completes the action plan by selecting appropriate management options which respond to the pressures identified and protect the recorded landscape features.

Points are allocated according to the options chosen and this determines the environmental support tier the farmer is eligible to enter. The action plan may be produced under the advice of a competent authority or an authorised consultancy firm. The more points, the higher the tier the farmer can enter. The plan forms an agreement between the farmer and the Competent Control Authority and once approved the farmer is eligible to receive the support payment.

- Farmers would be visited by the CCA on an annual or bi-annual basis to ensure the plan is kept up-to-date. Baseline environmental information could be collected when the plan is first drawn up, particularly in high nature value farmland and forestry areas, and updated each year as part of a monitoring system.
- All farmers, particularly those not entitled to the additional income support payment would be able to utilise income risk management tools such as agricultural insurance and future contracts in order to help guarantee income levels in the face of fluctuations in market prices or crop failures. These would be provided commercially by the market.

Potential improvements offered by this policy option compared to the current cross compliance system

The introduction of the compulsory environmental management plan as a precondition of receiving the support payment may raise awareness of the environmental impact of farming and, at the same time, help to provide guidance on how the negative impact might be minimised. In contrast to the current system of cross compliance where raised awareness seems to appear as a result of control and punishment procedures, farmers' awareness under this option increases as a result of an improved knowledge and incentive structure. The environmental plan allows for the maintenance of agricultural land in good agricultural and environmental condition to be handled in a local landscape context. Local environmental problems are targeted instead of general environmental problems or those solely addressed by legislation. The environmental benefit will be both visible and documented.

There are a number of other improvements that are not directly related to the objectives of cross compliance. The new payment system is likely to fulfil WTO obligations, with the environmental payment likely to be considered to be minimally trade distorting. There may be doubts as to whether the suggested income payment for farmers in less favoured areas is acceptable in this context. However the rationale for the income payment is to maintain the environmental quality of the countryside through farming, rather than to support farmers per sé. If the income payment is not acceptable, this type of payment could be replaced by an additional environmental payment. Another advantage of this policy option is that, in principle, there is no threat of a double sanction, which could increase farmers' acceptance, as might a system that is based on knowledge and incentives. The option also provides farmers with some flexibility as different management options are available.

Implications for actors

- Farmers

Under this option farmers would be paid for producing environmental goods. This would require a change in mentality for the farming community. The new payment system may also result in a redistribution of funds among farmers and this may require acceptance. Secondly, the system will put new demands on farmers. In

addition to the need to provide proof of compliance with mandatory standards, the environmental management plan has to be prepared. Its preparation may require new knowledge or the use of consultancy services. This may result in an administrative burden. For certain farmers the new system will demand a bigger change in management practice depending on the Tier level the farmer decides to join. The new system is likely to be less demanding for those farmers who have already implemented environmental friendly farming practices.

- National administrations

On the one hand the integration of Pillar I and II will simplify the administrative system as only one payment system and one control system is needed. On the other hand the new system is administratively demanding because all farmers who enter above Tier 1 require a control visit every year or every second year and all agreements need to be made on an individual basis. Tier 1 contracts could be made in the form of a standard contract adapted to regional/local areas, which would alleviate some of the potential burden. Contract negotiation may also involve a new form of advice and guidance. In order to lower the cost of control it may be possible to introduce a kind of self-assessment for smaller farms, where the farmers themselves control a certain part of the plan and its implementation. Controls by the Competent Control Authority may then only be done in the form of an on the spot control on a selected sample. A greater focus on local landscape and local environmental problems will demand the decentralisation of the national agricultural policy system in some cases, or at least more co-operation with local authorities and NGOs. The success of the new program will also depend on adequate resources being made available by both the EU and possibly the national exchequer.

Potential benefits for the environment and in promoting sustainable agriculture

The integrated approach presented here is likely to deliver well defined environmental benefits that are adapted to local needs and conditions. The approach promotes sustainable agriculture by securing environmental quality, and at the same time provides additional income options for farmers. However, because of the high baseline of environmental performance for Tier 2 there is a risk that certain farmers may decide to 'opt out' of the support system. Farmers would still be required to respect mandatory legislation, although other priority environmental issues might not be addressed. This in part depends on the design of an appropriate incentive structure.

3.3 Research Needs in Relation to Future Policy Options

The policy options were developed in order to stimulate thinking about the future orientation of cross compliance. They are not definitive but highlight the opportunity to reassess how the broad objectives of cross compliance might be met through alternative means. Neither are the options mutually exclusive, and different elements from different options could be fused together to present another alternative approach. Each option could also be considered as part of a number of stepping stones that are implemented in sequence over time as political and policy circumstances allow. This exercise shows there is scope to adjust and develop cross compliance further, and this highlights another research need.

15. Developing an evaluation framework to develop future policy options for cross compliance.

Given the 2007 review of cross compliance, the impending CAP Health Check, and changing policy and political priorities, it is intellectually and practically relevant to develop alternative approaches to meeting the objectives of cross compliance and, more specifically, environmentally sustainable agriculture. The policy options described in this report could be a starting point, but other inventive options could also be developed. These options would need to be tested for their viability. The list below gives an initial idea of the kind of factors that could be taken into account:

- The respective roles of regulation, cross compliance, rural development measures (in particular agri-environment payments) and other approaches to contribute to environmentally sustainable agriculture.
- The purpose and design of SMRs.
- The purpose and design of GAEC standards.
- The rules on permanent pasture.
- Ability to deliver environmental benefits.
- Limits to the provision of environmental benefits.
- The potential to safeguard the environmental benefits delivered by set-aside if set-aside is abolished.
- The inspection system including the inspection rate, selection method, and penalties applied.
- The role of the Farm Advisory System.
- The objective behind making payments to farmers.
- The monitoring and evaluation of environmental impact.
- Implications for the CAP budget.
- Impacts on administrative burden, both for national administrations and farmers.
- Overarching EU strategic policy priorities.
- WTO obligations, in the context of the outcome of the Doha Development Round.
- Acceptability to farmers, interest groups, the public and Member States.
- Effectiveness and efficiency in relation to the cost of implementation.

These, and other factors, could be developed to form an evaluation framework in order to develop policy options. Options could be further tested and validated at stakeholder workshops or through interviews and surveys. If any policy option is developed further, stakeholder engagement in the design process is important in defining environmentally meaningful standards that are acceptable both to farmers and national administrations.

4 PRIORITY AREAS FOR FUTURE RESEARCH ON CROSS COMPLIANCE

A key objective of the Cross Compliance Network project was to identify areas for future research to support the development of cross compliance. Future research needs were identified in each thematic paper written for the study. These are consolidated in this report. These needs were discussed by members of the Cross Compliance Network project team in a workshop style session in order to determine where future research efforts could be directed. These needs are felt to have relatively equal merit. Most of the research needs (the first thirteen listed below) take the form of monitoring and evaluation studies. The final two needs highlight the need to examine the role of cross compliance in the broader policy framework. These research needs could be integrated into one cohesive study, or discrete elements could be pursued individually. It is felt appropriate for DG Research and the research community to reflect on the messages of this report and the identified research needs as a first step to proceeding with designing future research.

A total of 15 future research tasks are listed below. These are hyperlinked to the appropriate section of this report.

1. Increasing the effectiveness and efficiency of on-the-spot controls.
2. Determining appropriate sanctions.
3. Utilising non-compliance data to help evaluate the environmental impacts of cross compliance.
4. Utilising non-compliance data to help evaluate the choice of SMRs and GAEC standards that are appropriate for inclusion in the cross compliance enforcement system.
5. Understanding farmers' behaviour in relation to cross compliance.
6. Understanding the scope to develop synergy between cross compliance control systems and private certification schemes.
7. Monitoring the effectiveness of the Farm Advisory System.
8. Improving the targeting of the Farm Advisory System.
9. Understanding whether cross compliance responds to identified environmental priorities.
10. Critically reviewing the permanent pasture rules.
11. Monitoring the environmental impact of cross compliance.
12. Determining the relative impacts of decoupling and cross compliance on the environment.
13. Understanding how cross compliance has different environmental impacts on different farm types.
14. Understanding the cross compliance/agri-environment scheme dynamic.
15. Developing an evaluation framework to develop future policy options for cross compliance.

5 CONCLUSIONS: FUTURE RESEARCH NEEDS FOR CROSS COMPLIANCE

The conclusions of this report and the Cross Compliance Network study are presented below. Two key groups of research needs in direct relation to cross compliance are identified. An additional two broader research needs that concern the development and evaluation of EU agricultural policy are also identified. The need to pro-actively examine the future evolution of cross compliance is also presented.

There are two key groups of research needs

The Cross Compliance Network study identifies two broad groups of research needs. The first set belongs to the arena of monitoring and evaluation. These needs highlight the importance of identifying the benefits of cross compliance and of finding ways to deliver greater benefit, perhaps by improving the effectiveness and efficiency of cross compliance. The second group identifies the need for research to examine the role of cross compliance in the broader policy framework.

Different ways to safeguard the environmental benefits delivered by cross compliance may need to be found if direct payments, and therefore the leverage offered by cross compliance, are reduced in the future. Whilst in the short-term, research should focus on maximising the potential of cross compliance to deliver environmentally sustainable agriculture, in the longer term research should address how cross compliance should evolve as part of a possible wider CAP reform agenda.

The value of real time policy evaluation

The Cross Compliance Network study demonstrates the value of interactive policy research. Bringing together individuals of different backgrounds and expertise on a regular basis to help evaluate the outputs of both a research project and the policy measure on which it is focused adds another dimension to standard policy evaluation techniques. This is particularly relevant where the policy of interest is in a process of evolution and concerns a large number of stakeholders. Exchange allows the ambiguities surrounding the implementation of a policy to be discussed and provides the opportunity for Member States and other stakeholders to learn from one another.

This study points to the value ‘real time policy evaluation’ as part of a research methodology. Such an approach can allow, based on the best available evidence, rapid and well-founded judgements to be made with stakeholder engagement. Such an approach could include the familiarisation of the research community and stakeholders with the detail of procedural issues and administrative details during the initial implementation of a policy, and then provide the opportunity for the same stakeholders to assess the impacts after a given period of time. This would aid the development of a feedback mechanism and provide the opportunity to make recommendations regarding policy refinements as identified and evidence based needs arise.

The need for consistent EU wide data on the environmental impacts of agriculture

There is a lack of consistent and EU wide data on the environmental impact of agriculture and agriculture policy measures. In the context of cross compliance, this makes it difficult to assess whether the policy is helping to alleviate environmental

pressures and promote environmental sustainability. Within Pillar II of the CAP, Member States are required to make use of a Common Monitoring and Evaluation Framework (CMEF) in order to measure the impact of rural development measures such as agri-environment schemes and Natura 2000 payments. This involves the collection of baseline data at the start of the programming period, which is then updated in order to allow judgements of the impact of programme measures to be made. The CMEF does not currently apply to Pillar I of the CAP. To a certain extent, a knowledge gap exists regarding the environmental impacts of Pillar I measures, such as decoupling and cross compliance. Currently, economic and structural data is collected through the Farm Accountancy Data Network and the Farm Structure Survey in all Member States, but there is no comparable dataset for environmental data.

The experience of EU fisheries policy is relevant here. Following the adoption of the 'ecosystems based approach', eight environmental indicators have been proposed for inclusion in a revised version of the Common Fisheries Policy's 'Data Collection Regulation' (DCR) (Regulation 1543/2000), which currently requires Member States to operate multi-annual programmes to collect biological and economic data. This formalised approach ensures harmonised data is collected at the EU level, allows assessments to be made about the sustainability of fish stocks and facilitates comparison between different areas. In the review of the DCR in 2007, the Commission will propose to Member States additional environmental data requirements to the existing dataset. This is expected to improve the evidence base and capacity of the European Commission to make policy decisions relating to the implementation of the ecosystem-based approach to management, a key objective under the new framework (Regulation 2371/2002) (Lutchman *et al*, 2007).

The applicability of this approach for the agriculture sector could be assessed. The potential for developing an integrated database, based on a set of core indicators, that can examine both the impact of Pillar I and Pillar II measures, could be examined. This could provide a robust database from which to evaluate the environmental impacts of all CAP measures.

The future of cross compliance

Cross compliance has a clear role to play in promoting sustainable agriculture. It has, for example, helped to improve the implementation of environmental measures at Member State level. However, cross compliance will need to evolve as policy and political priorities change over the coming years. The policy options developed for this paper suggest that a number of changes can be made in the focus and function of cross compliance, both in the short-term and in the medium-term. These suggestions aim to build on the improvements already delivered by cross compliance, but also seek to address some of the shortcomings of cross compliance so that it may better meet its objectives in the future. The European Commission's 2007 review of cross compliance and the CAP Health Check are likely to present some refinements to the system of cross compliance, but scope will remain to discuss the value and feasibility of pursuing more fundamental revisions to the current system for implementation in the future, perhaps 2013, or possibly beyond. These discussions will need to address the rationale for making direct payments to farmers, how the competing priorities of supporting farmers' incomes, producing food and delivering public goods should be balanced, and the most suitable configuration of policy tools, cross compliance

included, to ensuring these priorities are met within a defined timescale. These discussions need to begin to take place now.

6 REFERENCES

Literature

- Beaufoy, G, Baldock, D and Clark, J (1994) *The Nature of Farming*, IEEP: London.
- Buckwell, A. *et al* (1997) *Towards a Common Agricultural and Rural Policy for Europe*. Report of an Expert Group for the European Commission, April 1997.
- Christensen, T and Rygnestad, H (2000) *Environmental Cross Compliance: Topics for Future Research*, SJFI Working Paper no. 1/2000.
- Cross Compliance Network (2006a) *Overview of SMRs in Nine Member States*. Deliverable D4 of the CC Network Project, SSPE-CT-2005-022727.
- Cross Compliance Network (2006b) *Overview of GAEC Standards in Nine Member States*. Deliverable D4 of the CC Network Project, SSPE-CT-2005-022727.
- Davies, B and Hodge, I (2006) *Farmers' Preferences for New Environmental Policy Instruments: Determining the Acceptability of Cross Compliance for Biodiversity Benefits*, *Journal of Agricultural Economics*, Vol 57 (3), 393-414.
- DG JRC (2006) *Economics of Food Quality Assurance and Certification Schemes Managed Within an Integrated Supply Chain*. Final Report.
- Dimopoulos, D, Fermantzis, I and Vlahos, G (2006) *The Responsiveness of Cross Compliance Standards to Environmental Pressures*. Deliverable D12 of the CC Network Project, SSPE-CT-2005-022727.
- Duke, Guy (ed.) (2005) *Biodiversity and the EU – Sustaining Life, Sustaining Livelihoods*. Conference Report. Stakeholder Conference held under the Irish Presidency of The European Union in partnership with the European Commission, 25th - 27th May 2004, Grand Hotel, Malahide, Ireland.
- Dwyer, J, Mills, J and Gaskell, P (2004) *Monitoring the Effects of CAP Reform: Environmental Observatory Scoping Study*, Final Report by Countryside and Community Research Unit for Defra.
- EEA (2004) *High nature value farmland - Characteristics, trends and policy challenges*.
- EEA (2007) *Report on recommended Farm Advisory Tools*, December 2006, CIFAS study.
- Farmer, M and Swales, V (2007) *Exploring the Synergies between Cross Compliance and Certification Schemes*, Deliverable 8: *Synthesis Report of Certification Schemes in 7 EU countries and 3 non-EU countries*, Paper prepared for SSPE-CT-2005-006489 *Facilitating the CAP reform: Compliance and competitiveness of European agriculture*.

- Herzog, F *et al.* (2005) Effect of ecological compensation areas on floristic and breeding bird diversity in Swiss agricultural landscapes, *Agriculture, Ecosystems and Environment*, 108, 189–204.
- Jongeneel, R *et al.* (2006) Deliverable 9: Mandatory standards in 7 EU countries and 3 non-EU countries, Paper prepared for SSPE-CT-2005-006489 Facilitating the CAP reform: Compliance and competitiveness of European agriculture.
- Juntti, M (2006) Riding the green wave in the European agricultural sector? A discourse analysis of the new cross compliance mechanism. CSERGE Working Paper EDM 06-15.
- Knop, E *et al.* (2006) Effectiveness of the Swiss agri-environment scheme in promoting biodiversity, *Journal of Applied Ecology*, 43, 120–127.
- Kristensen, L and Primdahl, J (2006) The Relationship Between Cross Compliance and Agri-environment Schemes, Deliverable D13 of the CC Network Project, SSPE-CT-2005-022727.
- Lutchman, I., Brown J., Tasker, M. and Rochet, M.J. (2007) Policy and institutional changes required in support of ecosystem indicators. Deliverable 25 of INDECO, Development of Indicators of Environmental Performance of the Common Fisheries Policy. Project no. 513754.
- McInnes, J (2007) Administrative Burdens in European Agriculture: An Evidence Base, Defra Report.
- Moravec, J and Zemeckis, R (2007) Cross Compliance and Land Abandonment, Deliverable D17 of the CC Network Project, SSPE-CT-2005-022727.
- Muessner, R, Karaczun, Z, Dworak, T and Marsden, K (2006) Final Report About Cross Compliance and the WFD, prepared for CAP and WFD project SSPE-CT-2005-006618-CAP-WFD.
- NFU (2006) Cross-compliance with the Single Payment Scheme: The National Farmers' Union of England and Wales Preliminary Submission to DG Agriculture
- Nitsch, H (2006) Administrative Arrangements for Cross Compliance, Deliverable D11 of the CC Network Project, SSPE-CT-2005-022727.
- Nitsch, H and Osterburg, B (2007) Efficiency of cross compliance controls – public administrative costs and targeting, Deliverable D18 of the CC Network Project, SSPE-CT- 2005-022727.
- Pallemaerts, M, Wilkinson, D, Bowyer, C, Brown, J, Farmer, A, Farmer, M, Herodes, M, Hjerp, P, Miller, C, Monkhouse, C, Skinner, I, ten Brink, P and Adelle, C (2006) Drowning in Process? The Implementation of the EU's 6th

Environmental Action Programme Report for the European Environmental Bureau. IEEP, London.

Poux, X and Romain, B (2007) The impact of cross compliance on farming systems and land use: a European analysis, Deliverable D19 of the CC Network Project, SSPE-CT-2005-022727.

Povellato, A and Scorzelli, D (2006) The Farm Advisory System: A Challenge for the Implementation of Cross Compliance, Deliverable D14 of the CC Network Project, SSPE-CT-2005-022727.

Swales, V (2006) Cross Compliance: An example of better regulation? Deliverable 15 of the CC Network Project, SSPE-CT- 2005-022727.

Swales, V. (2007) The Likely Effects of Cross Compliance on the Environment, Deliverable 20 of the CC Network Project, SSPE-CT-2005-022727.

Wood, K (2005) Report on findings of a survey of member states, investigating plans to implement the EU requirement for a Farm Advisory System, Report For Defra.

EU Documents

Communication from the Commission on Simplification and Better Regulation for the Common Agricultural Policy, COM (2005) 509, 19.10.2005.

Communication from the Commission to the Council, the European Parliament, The European Economic and Social Committee and the Committee of the Regions A strategic review of Better Regulation in the European Union, COM (2006) 689, 14.11.2006.

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions Action Programme for Reducing Administrative Burdens in the European Union, COM (2007) 23, 24.1.2007.

Communication from the Commission to, the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme Brussels, COM(2007) 225 final, 30.4.2007.

Council Decision of 20 February 2006 on Community Strategic Guidelines for Rural Development (Programming Period 2007-2013), 2006/144/EC, OJ L 55, 25.2.2006.

Council Regulation 1257/1999 of 17 May 1999 on support for rural development, OJ L 160, 26.6.1999.

Council Regulation 1543/2000 of 29 June 2000 establishing a Community framework for the collection and management of the data needed to conduct the common fisheries policy, OJ L 176, 15.7.2000.

Council Regulation 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy, OJ L 358, 31.12.2002.

Council Regulation 1782/2003 of 29 September 2003 establishing common rules for direct support schemes for farmers, OJ L 270, 21.10.2003.

Council Regulation 796/2004 of 21 April 2004 laying down detailed rules for the implementation of cross compliance, OJ L 141, 30.4.2004.

Council Regulation 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development, OJ L 277, 21.10.2005.

Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme, OJ L 242, 10/9/2002.

Joint Declaration of the Council and the Commission (2004) Implementation of the reform of the Common Agricultural Policy: Cross compliance 16226/04, 17.12.04.

Report from the Commission to the Council on the Application of the System of Cross Compliance, COM (2007) 147, 29.03.2007.