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ENVIRONMENTAL PUBLIC GOODS IN THE NEW CAP: IMPACT OF GREENING PROPOSALS AND POSSIBLE ALTERNATIVES

NOTE

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NOTE

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Abstract

This note discusses the greening component of direct payments in the Commission's legislative proposals of October 2011 for the Common Agricultural Policy in the period after 2014. Based on an analysis of their likely consequences it puts forward a range of options for the consideration of MEPs for how these proposals might be amended to improve their environmental impact, to reduce their administrative complexity and to improve their cost-effectiveness, including possible alternatives.

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CONTENTS

LIST OF ABBREVIATIONS

AEM	Agri-environment measure
CAP	Common Agricultural Policy
COMAGRI	Committee on Agriculture and Rural Development of the European Parliament
ECA	Ecological Compensation Area (term used in Switzerland)
EFA	Ecological Focus Area
EU	European Union
FADN	Farm Accountancy Data Network
GAEC	Good Agricultural and Environmental Condition
HNV	High Nature Value
MEP	Member of the European Parliament
MS	Member State
OECD	Organisation for Economic Co-operation and Development
PEA	Potentially Eligible Area
RDP	Rural Development Programme
SMR	Statutory Management Requirement
UAA	Utilised Agricultural Area
WTO	World Trade Organisation

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EXECUTIVE SUMMARY

Background

The European Commission presented a set of legal proposals to the European Council and the European Parliament setting out proposed changes to the Common Agricultural Policy (CAP) for the post-2013 period on 12 October, 2011 (European Commission, 2011a, and associated texts). The draft regulations contain, *inter alia*, a proposal that 30% of the direct payments envelope of each Member State should be paid to farmers contingent on a set of "greening" requirements being met. The requirements include ecological focus areas (EFAs), crop diversification and the maintenance of existing areas of permanent pasture at farm level. Participants in the proposed small farmers' scheme are exempt and organic farmers would automatically receive the greening payment.

Reactions to this greening proposal have varied widely. Some groups have welcomed the Commission's plan to link direct payments more specifically to management measures by farmers designed to deliver improved environmental outcomes. Other groups have criticised the Commission's proposals on the grounds that they will be cumbersome and costly to implement, of doubtful environmental value and that they would reduce the ability of the EU to increase food production in response to the global tightening of food supplies.

The purpose of this briefing note prepared for the European Parliament's Committee on Agriculture and Rural Development (COMAGRI) is to provide a preliminary evaluation of the Commission's greening proposal and the measures that it contains. As requested by COMAGRI, its focus is on ways that the relevant legislative texts put forward by the Commission could potentially be improved. The proposed measures are designed to provide environmental benefits but will have impacts on farming practices and hence involve associated costs. Both the benefits and the costs will depend on the finer details on each measure and how they are to be implemented. The lack of detailed eligibility conditions (to be agreed in implementing regulations and delegated acts) makes a definitive analysis difficult. The note draws where possible on published reactions of stakeholders and on the limited evidence available to date on the possible environmental and economic impacts of these measures, as well as on the more general literature addressing ways to require and encourage farmers to manage their land in more environmentally-sensitive ways.

Key findings

General principles

There is a need to scale up the EU's and Member States' responses to tackle environmental problems. The expertise of ecologists and conservationists should be drawn upon in designing these responses.

That greening might have an opportunity cost in terms of foregone output is not a justification to ignore or postpone action on greening.

Neither is the fact that the CAP should be greened a justification to ignore the evidence on how to do this in the most cost-effective manner.

The Swiss model of greening direct payments appears to have influenced the Commission's formulation of its greening proposal. There are significant differences between the two, but the Swiss model is a relevant comparison whose experience should be evaluated.

The Commission proposals

There are two main policy instruments in the current CAP to pursue greening, cross compliance standards for direct payments in Pillar 1 and agri-environmental measures under Pillar 2. Article 68 of Regulation 73/2009 introduced the idea of paying for environmental public goods through Pillar 1 for the first time.

Pillar 2 agri-environment measures (AEM) now cover around 24% of the land potentially eligible for payments. However, this proportion differs markedly among Member States. It can also vary markedly over time in the same Member State. AEM participants come predominantly from already relatively extensively farmed areas, while in intensively farmed regions higher opportunity costs usually prevent large-scale applications.

The novelty of the Commission's proposals lies in its attempt to define and fund mandatory green standards applicable across the EU which can be administered as a Pillar 1 direct payment.

Reaction to the Commission's proposals highlights five issues which can be used to evaluate alternative approaches to greening the CAP. These are universality, environmental effectiveness, administrative complexity and costs, cost effectiveness and fairness or equity.

Ecological Focus Areas

Ecological Focus Areas (EFAs) can potentially provide important environmental benefits. For the design of the scheme, it is important to establish whether its primary environmental benefits can be achieved by focusing mainly on less productive land or whether a more uniform distribution of EFAs over the EU land area is required.

The environmental benefits of EFAs will depend on the area allocated, their location, the quality of management, their spatial connectivity and the provision of advice. Apart from the first, the current proposal does not contain measures to influence these other aspects.

The effects of EFAs on production will depend on which landscape features, land use and management practices are permitted.

Issues raised around EFAs include how the base area is defined; permitted land uses; the 7% minimum requirement; treatment of farm structure and scale issues; connectivity and how best to encourage appropriate management.

Crop diversification

Crop diversification can have environmental benefits but these are likely to be less than for crop rotation, which is ruled out as an annual measure by the Commission for administrative reasons.

The Commission estimates that the number of farms and, more important, the proportion of the arable area, likely to be affected by this measure is relatively small (a figure of 2% is

given in the Commission impact assessment). But there are national studies which suggest that a higher proportion of farms would be affected.

Issues raised around the crop diversification requirement include: the definition of a crop; the minimum scale of arable area before the requirement applies; how to deal with permanent crops; and the potential for unintended perverse effects on mixed livestock farms.

Permanent pasture restriction

The Commission proposal would replace the current requirement that Member States must maintain their area under permanent pasture at existing levels.

Protecting permanent grassland can have benefits for the environment. However, the current definition does not distinguish between valuable permanent pasture which is rarely, if ever, cultivated or re-seeded and is more likely to consist of semi natural vegetation, and less valuable pasture which is periodically cultivated or re-seeded.

The Commission proposal has a potentially high cost for very limited environmental value. A measure that focuses more specifically on those grasslands of high biodiversity value would be preferred.

Assuming the measure is retained, the issues raised around the Commission proposal include: the definition of permanent pasture; whether rotation of permanent pasture is allowed; the 5% franchise; and the need for greater focus on high-nature-value (HNV) grasslands.

Cross-cutting issues

The Commission proposes that 30% of the direct payments budget should be allocated to greening which appears to be an arbitrary figure. It would be desirable to allocate funds to achieve agri-environmental objectives on the basis of their costs as is done with AEM in Pillar 2. Given the wide observed cost differences between Member States of the greening measures, this would argue for funding these schemes through Pillar 2 rather than Pillar 1.

Environmental pressures, existing environmental performance, the costs of compliance and the value of the Pillar 1 green payment will all differ across Member States, raising complex issues of fairness and equity.

Effective monitoring and evaluation methods will be essential to assess the on-going effectiveness of the greening measures.

There is a danger that the Commission’s proposals could risk that the green payment would not be considered a green box payment for WTO notifications.

Assuming Pillar 1 greening goes ahead, there is a need for a clear distinction between cross-compliance, Pillar 1 greening and Pillar 2 agri-environment schemes.

Adding flexibility to the Commission proposals

There are few other potential candidates which could be considered as 'simple, generalisable' Pillar 1 measures either in combination with or as a replacement for the three proposed by the Commission, but they include crop rotation and a premium for HNV grassland.

A menu approach has the advantage of giving greater flexibility to Member States, but at the risk that farmers in different countries would be treated differently. Menu schemes are easier to administer in Pillar 2 rather than Pillar 1.

The organic farming exemption in the Commission proposals has led to calls to allow other categories of farmers to be 'green by definition' and thus eligible for the green payment but exempt from the specific measures required. Such exemptions would not provide taxpayers with any additional environmental goods, are open to legal objections that they involve a double payment for the same practices, and could put the WTO classification of existing payments at risk. It therefore does not seem to be an appropriate route to follow in designing green payments.

Making the green measures part of GAEC standards (effectively what is implied if the green payment is mandatory) is a possible approach to offer flexibility to MS while minimising administration costs and remaining within the constraints of greening the CAP through relatively undifferentiated, broad brush measures undertaken by all farmers.

Greening through Pillar 2

The viability of any option to purse greening through Pillar 2 depends on an increased budget allocation for this Pillar or greater prioritisation for AEM within the Pillar.

A larger Pillar 2 budget would permit a larger number of farmers to enrol in Pillar 2 AEM but would still be unlikely to cover the whole territory.

Linking a larger Pillar 2 budget with higher GAEC standards is an attractive option to build on the advantages of a targeted approach while raising minimum standards across the entire land area.

The proposal that farmers should enter a basic AEM scheme in Pillar 2 in order to be eligible for a payment in Pillar 1 (referred to as 'conditional greening') does not warrant further examination at this point in time.

More ambitious Pillar 2 schemes will need more funding. The most desirable option would be to secure a larger relative Pillar 2 budget in the negotiations on the Multi-annual Financial Framework. If this is unsuccessful, Agricultural Ministers could shift resources from Pillar 1 to Pillar 2 through modulation. Even within Pillar 2, it would be possible to shift expenditure towards AEM by raising the mandatory minimum percentage to be spent on such measures.

Key recommendations

The purpose of this note is to assist MEPs in a practical way to identify the issues raised by the Commission's greening proposals as they formulate their responses. The recommendations of the note are presented in the form of a decision tree. The idea is that MEPs first choose which branch of the tree they wish to follow and, depending on that choice, following that branch identifies a series of possible amendments to the Commission's proposals designed to achieve the objectives of that branch. Of course, the various branches are not water-tight and, within limits, it would be possible to mix and match between them, so the decision tree is primarily a heuristic device.

Weaken/remove the Commission's greening proposals

This branch of the tree is intended for those who do not support the Commission's proposal to green Pillar 1 and who may not support any greening agenda in the CAP. Aside from seeking to remove all references to greening in the Commission's proposals, the options available on this branch of the tree include:

- Reduce the greening element from 30% of the direct payment national ceiling.
- Make the green payment an opt-in payment so that it is effectively voluntary and ensure that sanctions for non-participation do not go beyond the loss of the green payment itself.
- Remove one or more of the greening measures:
    - Leave the permanent pasture restriction as it is under the current rules, at the member state level.
    - Remove the crop diversification requirement (only 2% of land area affected, poor return measured against the additional administration).
    - Lower or remove the EFA requirement from 7%.

Support modified Commission proposals

This branch builds on the Commission proposals but modifies them to maximise environmental benefits and address some unintended consequences. The options available on this branch of the tree include:

- EFAs
    - Clarify the definition of the base area
    - Clarify permitted land uses
    - Consider whether the 7% threshold should be revised up or down, or linked with the type of management undertaken
    - Stimulate realisation of green infrastructure by encouraging connectivity
    - Define management prescriptions
- Crop diversification
    - Clarify what counts as a crop in meeting the diversification criteria
    - Change the minimum area threshold above which the measure is required
    - Consider whether the upper maximum proportion for the main crop should be changed
    - Clarify the treatment of permanent crops
    - Address the potential for perverse unintended consequences on mixed livestock farms

- Permanent pasture
  - Review the definition of permanent pasture
  - Consider whether rotational flexibility should be allowed
  - Reflect on how to avoid perverse effects from setting the reference year baseline to 2014
  - Consider increasing the tolerance/franchise at farm level from 5%
  - Consider introducing farm-level limits only if there is a risk that a country might fall below its national reference level
  - Put greater focus on protecting high-nature-value grassland.

Provide more flexibility to Member States in Pillar 1 greening

This branch of the tree explores alternative options for greening within a Pillar 1 framework. The options available on this branch of the tree include:

- Consider the introduction of further 'simple, generalisable' greening measures
  - Crop rotation
  - Strengthened focus on HNV grassland
  - Green growth and resource efficiency issues
- Consider allowing MS to define their own menu of measures
  - How much of this menu should be defined in the basic regulation, bearing in mind that what is defined in the regulation will set the baseline for Pillar 2 AEM schemes?
  - How can the powers of the Commission as arbiter of minimum standards be ensured?
- Consider extending the the organic farming exemption
  - What other farm criteria might be deemed equivalent to determine eligibility for the green payment?
  - How might the charge of 'double payment' be avoided if enrolment in an AEM were deemed to confer automatic eligibility for the green payment?
- Consider implementing the green measures by incorporating them in GAEC with its associated MS flexibilities. The Swiss have shown it is possible to incorporate quite sophisticated environmental conditionalities into cross-compliance rules.

Promote greening through more ambitious targeted Pillar 2 measures

This branch of the tree explores options to pursue greening through Pillar 2. The areas of work on this branch might include:

- If the negotiations on the next MFF fail to significantly increase the amount of resources devoted to Pillar 2, should the option of mandatory modulation of funds from Pillar 1 to Pillar 2 be examined?
- Should the allowance for voluntary modulation by MS of 10% of their Pillar 1 national ceilings to Pillar 2 be increased?
- Might Member States be given the option of transferring their 30% green payment budget to Pillar 2 for use in AEM schemes in return for relief from the greening measures in Pillar 1?
- Should a mandatory proportion of each MS national ceiling be allocated to measures addressing the environment and climate change, and should that be increased significantly above the 25% figure mentioned in the preamble to the Commission's rural development regulation?

Recommended strategy

The Commission proposal would allocate a budget of almost 13 billion euro annually to further green the CAP. One way to think about the optimal way forward is to ask: how could this budget best be spent to get the maximum agri-environmental benefits?

The underlying assumption of this note is that more needs to be done, on top of the measures already enacted, to encourage more environmentally-sustainable management of agricultural land.

The Commission strategy is to propose shallow, one-size-fits-all, greening measures in Pillar 1. The analysis in this note strongly supports the advantages of pursuing greening through Pillar 2 as recommended in the Parliament's July 2010 resolution on the future of the CAP after 2013. Thus, the most desirable way forward would be to follow the branch of the decision tree which promotes more ambitious targeted and flexible Pillar 2 AEM schemes which would require a further shift of funds from Pillar 1 to Pillar 2, in line with the trajectory pursued since the Agenda 2000 reform. If the Council of Ministers decides not to alter the Commission MFF proposal in this respect, it would still be open to the Parliament to amend the direct payments regulation to provide for further modulation of the Pillar 1 national ceilings so that the green component of this budget could be transferred to Pillar 2. Greening Pillar 1 in the manner proposed by the Commission is very much a second-best option in terms of both environmental effectiveness and economic efficiency.

1. INTRODUCTION

1.1. Background

The European Commission presented a set of legal proposals to the European Council and the European Parliament setting out proposed changes to the Common Agricultural Policy (CAP) for the post-2013 period on 12 October, 2011 (European Commission, 2011a, and associated texts). There proposals followed a review of policy options contained in the Commission's Communication *The CAP towards 2020* of 18 November 2010 (European Commission, 2010).

The draft regulations contain, *inter alia*, a proposal that 30% of the direct payments envelope of each Member State should be paid to farmers contingent on a set of "greening" requirements being met. The requirements include ecological focus areas (EFAs), crop diversification and the maintenance of existing areas of permanent pasture at farm level. Participants in the proposed small farmers' scheme are exempt and organic farmers would automatically receive the greening payment.

While much political debate has focused on some of the distributional issues involving direct payments in the Commission's proposal, the greening proposal is the major *structural* novelty. If it were agreed, this would become the defining legacy of this CAP review, in the same way that decoupling is associated with the 2005 reform. From this perspective, greening encompasses more than the introduction of a green payment in Pillar 1. The Commission has also proposed changes to the cross-compliance standards of Good Agricultural and Environmental Condition (GAEC). There will be a need to revamp Pillar 2 agri-environment measures (AEM) and there is also an important role for the Farm Advisory Service in facilitating innovations in delivering climate change and environmental objectives. This note, however, concentrates solely on the proposal for a green payment in Pillar 1.

Reactions to this greening proposal have varied widely. Some groups have welcomed the Commission's plan to link direct payments more specifically to management measures by farmers designed to deliver improved environmental outcomes. Other groups have criticised the Commission's proposals on the grounds that they will be cumbersome and costly to implement, of doubtful environmental value and that they would reduce the ability of the EU to increase food production in response to the global tightening of food supplies.

The purpose of this briefing note prepared for the European Parliament's Committee on Agriculture and Rural Development (COMAGRI) is to provide a preliminary evaluation of the Commission's greening proposal and the measures that it contains. As requested by COMAGRI, its focus is on ways that the relevant legislative texts put forward by the Commission could potentially be improved. The proposed measures are designed to provide environmental benefits but will have impacts on farming practices and hence involve associated costs. Both the benefits and the costs will depend on the finer details on each measure and how they are to be implemented. The lack of detailed eligibility conditions (to be agreed in implementing regulations and delegated acts) makes a definitive analysis difficult. The note draws where possible on published reactions of stakeholders and on the limited evidence available to date on the possible environmental and economic impacts of these measures, as well as on the more general literature addressing ways to require and encourage farmers to manage their land in more environmentally-sensitive ways.

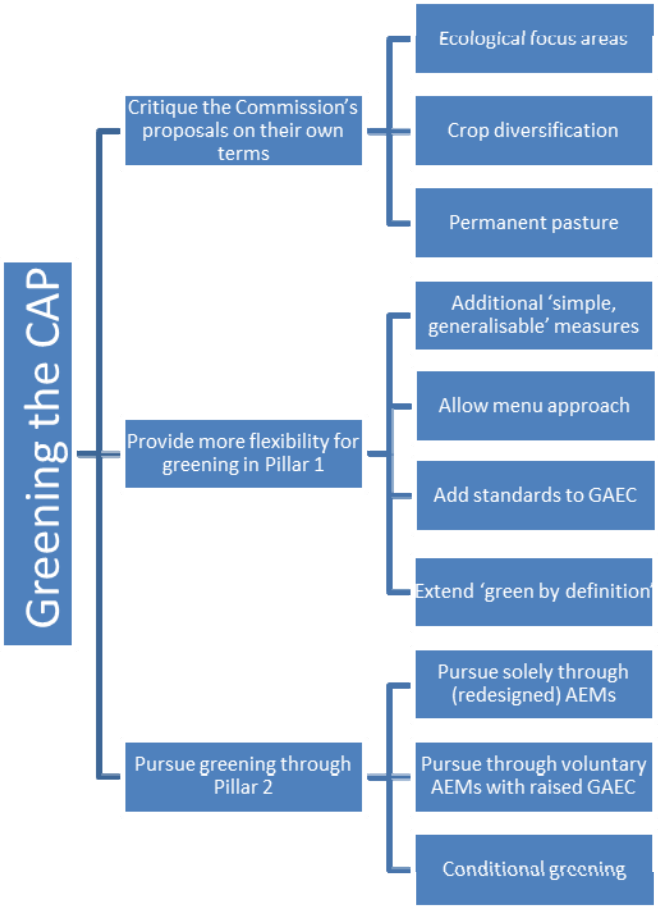
1.2. Approach of the report

It is not the purpose of this note to recommend an optimal design to achieve environmental public goods from first principles (for examples of such studies, see Bureau and Mahé, 2008; Buckwell, 2009; Hart et al., 2011). It is nonetheless important to evaluate the Commission's proposals against the principles of good design as outlined in the relevant literature and to situate these proposals in the context of these other reports as well as policies pursued in relevant exemplar countries. This is the task of the first section of this report.

The core of the note is developed in three stages (the logical structure is set out in Figure 1). In the first stage, the Commission's proposals are evaluated on their own terms. For this stage, the working assumption is made that the agenda for action is limited to the three measures proposed by the Commission. It is assumed that MEPs confine their attention to possible improvements to the way these measures might be implemented, for example, by altering some of the parameters proposed by the Commission.

The note then considers a number of cross-cutting issues that arise taking the Commission's approach to greening Pillar 1 as a whole. This analysis raises more fundamental questions about the impact of the proposals, and suggests the desirability of widening the greening agenda beyond the immediate proposal of the Commission.

Figure 1: Analysis framework for Commission's proposals to green the CAP



Source: Own elaboration

In the second stage of the analysis, the note looks at alternative ways of greening the CAP within Pillar 1. In this stage, we retain the Commission's basic approach of linking a component of Pillar 1 direct payments to environmental practices. However, we potentially widen the menu of greening measures and look at ways to provide flexibility to Member States to choose from this menu while ensuring a comparable level of environmental ambition. In this stage the note also evaluates the argument to build on the existing greening element of Pillar 1 contained in the cross-compliance rules by adding the greening measures (whichever are eventually agreed) as GAEC standards rather than introducing a new greening tier in Pillar 1.

In the third stage of the analysis, the agenda is widened further to examine options to improve the environmental performance of agriculture by revisiting and strengthening agri-environment measures (AEM) in Pillar 2. One option is to pursue more ambitious agri-environmental targets through voluntary AEM in Pillar 2, most likely combined with some upgrading of GAEC standards in Pillar 1. Another is to link the green payment to participation in basic agri-environment schemes in Pillar 2. Any proposal to pursue greening through Pillar 2 must address the question of shifting budget resources from Pillar 1 to Pillar 2.

1.3. Structure of the report

Section 2 briefly recapitulates the environmental challenges facing EU farmers and foresters as identified in the Commission's November 2010 Communication and in other documents. It discusses the priority which might be given to the production of environmental public goods in the light of the requirement to increase global food production in coming decades. It examines the Swiss approach to greening which has been an important influence on the Commission's thinking.

Section 3 briefly evaluates greening measures in the current CAP and describes the preferred approach of the European Parliament to this point. It then summarises the Commission's legislative proposal and emphasises the novelty of pursuing further greening through direct payments in Pillar 1. Some key points from the initial reactions to the Commission's proposals are highlighted, from which a set of criteria are derived which can be used to evaluate alternative approaches to greening the CAP.

Section 4 examines the Commission's proposal for EFAs. It reviews the expected environmental benefits and the potential costs of this proposal. Some possible unintended consequences are highlighted and potential modifications to the Commission's proposal are discussed.

Section 5 examines the Commission's proposal for crop diversification. It reviews the expected environmental benefits and the potential costs of this proposal. Some possible unintended consequences are highlighted and potential modifications to the Commission's proposal are discussed.

Section 6 examines the Commission's proposal to require farmers to maintain the existing area of permanent pasture on their holdings, subject to a small tolerance. It reviews the expected environmental benefits and the potential costs of this proposal. Some possible unintended consequences are highlighted and potential modifications to the Commission's proposal are discussed.

Section 7 discusses a number of cross-cutting issues that arise in evaluating the Commission's proposals. These include the rationale for the budget proposed, fairness across Member States, the importance of evaluation, what might happen to unused payments, the link with the flattening of direct payments, administrative issues and the simplification agenda, their WTO compatibility, and the implications for Pillar 2 schemes,.

Section 8 examines ways to increase the effectiveness and flexibility of the Commission's proposals while remaining within the constraint of Pillar 1 green measures. There are four approaches. The first is to identify further possible measures that might be added to, or substitute for, the three specific measures proposed by the Commission. Just adding measures might increase the effectiveness of Pillar 1 greening but would not add to flexibility. Various options to increase flexibility are possible. The first would allow Member States to choose from a menu of greening options, with the Commission acting as arbiter of equivalent levels of ambition. The second would allow Member States to define a menu of measures from which their farmers might choose, again with the Commission required to approve the plan to ensure an equivalent level of ambition. A third flexibility option is that farmers who meet certain criteria would automatically qualify for the green payment (the principle of 'green by definition'). Important here is what these criteria might be, and the implications of this approach for funding rules and the WTO compatibility of the payment. The fourth option would incorporate the measures into GAEC standards which already recognise MS flexibility.

Section 9 expands the agenda of possible options even further by considering how greening might be pursued through Pillar 2 rather than Pillar 1. For this option to be viable the provision of adequate budget resources for Pillar 2 would have to be addressed. There are three potential approaches to greening using Pillar 2. The first is to allocate a larger budget to Pillar 2 and to rely solely on incentivising farmer enrolment in Pillar 2 schemes on a voluntary basis, perhaps through some redesign of the typical AEM. To achieve the Commission's goals for increasing the provision of environmental public goods, the voluntary approach would probably have to be combined with some raising of GAEC standards in Pillar 1, defined as a second approach. The third is the conditional greening approach whereby eligibility for the Pillar 1 basic payment would be conditional on farmers enrolling in a basic agri-environment scheme in Pillar 2.

Section 10 presents the conclusions of the report by summarising the options open to MEPs as they review the Commission's legislative proposals on greening. A series of precise and practicable recommendations are set out in the form of a decision tree. Four options are presented, although within limits it would be possible to pick and choose from among these options. The options are: (1) to weaken or remove entirely the Pillar 1 greening element from the Commission proposals; (2) to support the three greening measures in the Commission's proposals funded by Pillar 1 but seek to modify them to improve their environmental effectiveness and to mitigate any unintended negative consequences; (3) to pursue greening in Pillar 1 but to provide more options and flexibility compared to what the Commission proposes; and (4) to pursue greening through Pillar 2 *either* in combination with a requirement that eligibility for the Pillar 1 direct payment should be conditional on participation in a basic agri-environment scheme in Pillar 2, *or* in combination with higher GAEC standards revised to incorporate measures similar to those proposed by the Commission in its legislative proposals but with flexibility for Member States to administer.

In choosing among these options, MEPs are encouraged to accept the importance of increasing the supply of environmental public goods and to do this in the most cost-effective manner possible. The concluding section argues that the optimal way to pursue this would be to pursue more ambitious, targeted and flexible Pillar 2 agri-environment measures, and to transfer the proposed funds for the green payment in Pillar 1 to Pillar 2 to allow this to happen. The opposition to shifting funds to Pillar 2 due to the co-financing requirement would have to be addressed in this context.

2. GREENING THE CAP: BASIC PRINCIPLES

KEY FINDINGS

- There is a need to scale up the EU's and Member States' responses to tackle environmental problems.
- That greening might have an opportunity cost in terms of foregone output is not a justification to ignore or postpone action on greening.
- Neither is the fact that the CAP should be greened a justification to ignore the evidence on how to do this in the most cost-effective manner.
- The Swiss model of greening direct payments appears to have influenced the Commission's formulation of its greening proposal. There are significant differences between the two, but the Swiss model is a relevant comparison whose experience should be evaluated.

2.1. Environmental challenges must be tackled

Europe's natural environment remains under threat. In some areas, progress is being made. Nutrient loads, pesticide, energy and water use, and ammonia and greenhouse gas emissions trends have all decreased in the EU-15 (EEA, 2010). However, the natural environment continues to face significant pressures, including ongoing declines in biodiversity and the challenges of climate change. Significant problems remain in relation to water scarcity and achieving good soil management. The continued destruction of hedgerows, stone walls and ditches and the drainage of wetlands contributes to the loss of valuable habitats for many birds, plants and other species. In the face of these pressures, the EU and its 27 Member States have committed to meet a number of environmental targets, including the EU's 2020 biodiversity objectives and targets for greenhouse gas emission reductions. Member States continue to have difficulty in living up to their obligations under the Nitrates Directive and face stringent challenges to comply with the Water Framework Directive. The report of the Rise Foundation Task Force summarises the empirical data in support of the view that the scale of market failure in the provision of environmental public goods is extremely large and that the policy responses to date have not been adequate (Buckwell, 2008).

There is thus a need to scale up the EU's and Member States' responses to tackle these problems. However, greater priority to the protection of nature and to the provision of environmental public goods may appear to conflict with increasing the EU's food production capacity. Some contributors to the debate on greening that followed the publication of the Commission's proposals have used the need to increase food production as an argument against pursuing further greening of the CAP at this point in time.[1] Since it is important to establish that greening of agricultural policy is warranted before undertaking a detailed examination of greening measures, this argument should be addressed at the outset.

[1] This concern would appear to be behind the opinion of COMAGRI that "before we undertake a further greening of the CAP we should examine the impact of such actions on the competitiveness of EU farming in the global market" (COMAGRI, 2011).

In the short run it is likely that higher environmental standards will conflict with increased food production (Van Zeijts et al, 2011).[2] Further, while some environmental measures may have a productivity-enhancing effect in the longer-run, this is not necessarily true of all such measures, at least some of which may be valued for their intrinsic benefits rather than as an insurance premium against future disasters. It is also important to take account of negative spillover and leakage effects. Extensification of land use within the EU may yield important environmental benefits (reduction in GHG emissions, enhancement of biodiversity) but if production falls, this will require intensification in third countries, with potentially offsetting or even greater environmental damage.

Choosing the appropriate level of provision of environmental public goods is fundamentally a political choice because the market for these goods is a very imperfect one, if indeed one exists at all, and requires the legislature to give expression to collective preferences. No one believes that European citizens have expressed a preference to promote food production at any cost, and without any regard to its environmental consequences. Similarly, no one seriously suggests that we should gold-plate environmental standards to the degree that would threaten food production in the EU. It is a question of finding the appropriate balance. While the demand for environmental public goods is income-elastic and tends to grow with rising affluence, arguably the recent rise in global food prices and the prospect that they will remain high for some time to come would seem to pull in the opposite direction.

There are a number of arguments against this call to ignore or postpone action to deal with the warning signs of environmental degradation.

Estimates of the impact of greening on agricultural production are very modest. Van Ziejts et al. (2011) in a comprehensive modelling study estimate that greening the CAP would lead to a decline in agricultural production of 2% for grass and 4% for cereals relative to baseline levels in 2020, although it is important to note that the Commission proposal is not identical to their scenario. Despite this decline in agricultural production, agricultural income is projected to even slightly increase due to market responses. Matthews (2011) calculated that, on the basis of the Commission's impact assessment, the impact of greening would be to add the equivalent of around 2% to the cost of inputs in EU agriculture. These are not trivial amounts, but in the context of expected annual growth in production and observed volatility in input prices they are not dramatic figures either.

It is not necessarily the case that food production and environmental public goods are in conflict. Environmental sustainability and food production may, in fact, be complements rather than substitutes. Over any time period other than the short-run, the maintenance of the EU's food production capacity requires the protection and preservation of ecosystem services.[3] There are positive feedback effects from environmental health to productivity and yields, even if the magnitude of these feedback effects is difficult to establish and will vary over time and place.[4]

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[2] For example, COPA-COGECA warn: "… the EU has the highest standards of environmental sustainability and animal welfare in the world but it has come at a price. Meeting these standards has led to higher costs, reduced productivity and low profitability just at a time when agriculture faces a whole series of new production challenges" (COPA-COGECA, 2011).

[3] The Rise Foundation Task Force notes that "There is little food without substantial clean water resources, productive soils, and appropriate climate. Long run human survival depends on healthy ecosystems and an adequate stock of genetic resources" (Buckwell, 2008).

[4] "It has not been possible to quantify economic benefits, due to the lack of data on the impact of the agricultural benefit of the measures on yields; moreover, any benefits would have in most cases a medium- to long-term time horizon and would vary significantly across regions and farming systems" (Commission, IA Annex 2).

Higher world food prices reduce the justification to use the CAP budget for basic farm income support but they increase the opportunity cost of providing environmental services. The higher cost of these services would be expected to lead to some decrease in the public's demand for them. Nonetheless, we would therefore expect to see a shift in the CAP budget away from basic income support to increased support for greening given the expectation of continued higher food prices in the medium term.

If there is a concern that agricultural resources might be diverted from food production, then it is much more important to address their use for biofuel production rather than the production of environmental public goods, where the former has considerably less justification. It is estimated that EU biofuel policies will increase the demand for cereals by almost 7% by 2020 over baseline and will more than double (+109%) the demand for oilseeds (Fonseca et al, 2010). These impacts on demand are considerably greater than the 4% reduction in arable output estimated using the same model (the CAPRI model) due to greening (Van Zeijts et al, 2011). If the impact on food production were a concern in evaluating the greening proposals, removing the EU's mandatory biofuels targets would be a more obvious place to start.

Most of the increased demand for food will arise in developing countries, and these countries should be encouraged and assisted to produce as much as possible of their additional food needs themselves. European farmers have the skills and resources to also contribute to increasing the global food supply, but this should not be at the expense of reducing incentives to increase production in developing countries. Removing remaining trade and import restrictions and in this way stimulating agriculture outside the EU would do as much to increase global food production.

An implicit assumption of those opposed to greening measures is that farmers will be worse off post-2013 because of their existence. This conclusion is based on the counterfactual assumption that farmers would continue to receive the proposed direct payments envelope even in the absence of the greening measures. In this sense, the greening measures are seen as an imposition, an additional cost, which would be avoided if only the Commission had not proposed them.

This argument ignores the political context that the greening proposals are a quid pro quo for the retention of the 2013 level of direct payments. While no-one can predict with total certainty what would happen to the CAP budget if the greening element were removed, there must be a strong presumption that the legislature would then find it much more difficult to justify continuing CAP spending at its previous levels. For example, one might envisage a situation in which, if the greening proposals were removed, the Pillar 1 direct payment envelope might also be reduced by 30%. As the greening cost is much less than 30% of the direct payment envelope (based on the estimated cost of €33/ha of PEA, the Commission's estimate of the cost of greening is around €5 billion compared to a green payment of almost €13 billion), it is evident that farmers would be better off with the higher budget envelope plus greening compared to a situation without greening but with a considerably reduced budget envelope. Greening may also benefit farmers because of higher market prices due to reduced supply, as well as higher consumer demand for EU production as it develops an enhanced reputation for sustainability. The assumption that greening is an extra cost on farmers is therefore hard to sustain.

We suggest two principles on the basis of the discussion in this section:

- That greening might have an opportunity cost in terms of foregone output is not a justification to ignore or postpone action on greening
- But also, the fact that the CAP should be greened is not a justification to ignore the evidence on how to do this in the most cost-effective manner.

This second bullet point is an important theme through much of the later discussion. It is not only legitimate, but necessary, to improve the environmental footprint of agriculture. But especially in the current climate of fiscal austerity in Europe, and with high global food prices, we cannot simply ignore the potential trade-offs. It makes equal sense to argue that resources should be used efficiently, and that we should try to maximise the environmental benefits from any given use of resources.

2.2. The Swiss model

The Commission's greening proposals have clearly been influenced by experiences in Switzerland, which has moved further and faster than the EU to green its direct payments. It is therefore of interest to examine the Swiss experience, although there are important differences which are highlighted later in this note.

Since 1993, Swiss agricultural policy has gone through a comprehensive reform, introducing mechanisms for lowering the prices of major agricultural products and the introduction of direct payments to compensate farmers for loss of income. A distinction is made between general and ecological direct payments (the latter similar to AEM payments in the EU). The structure of the programmes and the eligibility conditions applied remain largely unchanged under the current Swiss agricultural policy strategy *AP 2011* implemented since 2008 (OECD, 2011a).

General direct payments are compensation for the basic tasks, as set out in the constitution, of ensuring food supplies, maintaining the landscape and helping to preserve social structures in rural areas. They are made up of a sum based on the area of the farm plus a sum for grazing animals. The area payment per hectare of agricultural land is granted independent of any requirement to produce particular crops. The payments are subject to an income and asset ceiling and are differentiated by farm size. In upland and mountain areas additional sums are paid out to allow for the more difficult farming conditions.

Eligibility for the general direct payment is dependent on farmers proving that they comply with a set of minimum rules; the so-called "proof of ecological performance" (*Prestations écologiques requises – PER*). The key elements of proof of ecological performance are an appropriate proportion of ecological compensation areas (ECAs), rational use of fertilisers, crop rotation, soil protection, economic and specific use of plant treatment products and animal welfare measures (OECD, 2010).

In addition to the general direct payment system, farmers can also enrol in a voluntary agri-environment scheme which remunerates particular services separately through ecological direct payments. Among other things, the farmer receives additional payment for extensive meadow-land, reed-beds, natural field margins, permanent flowery meadows and rotated fallow fields, hedges, copses and wooded river banks and standard fruit trees. Farmers who wish to increase their ecological compensation areas beyond the minimum 7% required for cross-compliance receive additional payments under this scheme. Organic farming is also subsidised.

An additional programme was started in 2001 aimed at raising the quality of ecological zones and encouraging farmers to link them up (Lebeau and Righetti, 2008). The law on the regional promotion of the quality and connectivity of ecological compensation areas in agriculture allows the Swiss Confederation to allocate additional financial resources in favour of the creation of local and/or regional ecological networks, according to the general indicative lines followed by the National Ecological Network. The cantons are responsible for elaborating application criteria that are then submitted to the Confederation for approval. Until 2007, the payments made to the farmers could be up to CHF 500 per hectare of ECA connected to a network in accordance with the directives of the canton, but this has since been increased to CHF 1,000.

The goal of the new farm policy was that 95% of all farms fulfilled the ecological minimum requirement (this target was raised to 98% with the *AP 2007* policy reform programme). In 2004, 89% of all farms (or 97% of UAA) fulfilled the cross-compliance requirements (OECD, 2010). At present, approximately 10% of the Swiss UAA is farmed as ECAs.

Mixed views have been expressed on the environmental benefits of these measures. Lebeau and Righetti (2008) conclude that the positive effects on the quality of biodiversity have been rather modest. Farmers often register areas that had already been extensively farmed and where the loss of yield was least, and not the areas that are most valuable for protecting threatened species (however, it is often the case that it is the land with the lower productivity that has the higher ecological potential). Aviron et al (2009) monitored the effectiveness of cross compliance in promoting biodiversity on grassland and on arable land in Switzerland over an eight-year period. They observed measurable benefits for flora, butterflies, ground beetles, and spiders, in terms of species numbers and/or community composition. However, populations of threatened species showed no signs of benefit. They argue that the Swiss experience shows that common farmland biodiversity can be enhanced at the continental scale under cross compliance, although the conservation of threatened species needs to be addressed by specific programmes, acting at the scale of agricultural landscapes.

3. THE COMMISSION PROPOSALS

KEY FINDINGS

- There are two main policy instruments in the current CAP to pursue greening, cross-compliance standards for direct payments in Pillar 1 and agri-environmental measures under Pillar 2. Article 68 of Regulation 73/2009 introduced the idea of paying for environmental public goods through Pillar 1 for the first time.
- Pillar 2 agri-environment measures (AEM) now cover around 24% of the land potentially eligible for payments. However, this proportion differs markedly among Member States. It can also vary markedly over time in the same Member State. AEM participants come predominantly from already relatively extensively farmed areas, while in intensively farmed regions higher opportunity costs usually prevent large-scale applications.
- The novelty of the Commission's proposals lies in its attempt to define and fund mandatory green standards applicable across the EU which can be administered as a Pillar 1 direct payment.
- Reaction to the Commission's proposals highlights five issues which can be used to evaluate alternative approaches to greening the CAP. These are universality, environmental effectiveness, administrative complexity and costs, cost effectiveness and fairness or equity.

3.1. Greening in the current CAP

The provision of agri-environmental public goods is pursued both through environmental regulations and through agricultural policy. Within the current CAP, there are two main policy instruments.

Cross compliance standards for direct payments in Pillar 1 were introduced in 2005. Five sets of environmental concerns are covered by SMR (Statutory Management Requirements based on specific articles of EU environmental legislation) which are compulsory for farmers to pursue without payment. Good Agricultural and Environmental Conditions (GAEC) are compulsory for Member States and compulsory for farmers if they wish to receive direct payments. In many cases these are simply the translation of EU environmental legislation or other EU requirements into specific national obligations. There are also some GAEC standards which are optional for Member States (Annex 1 lists the current GAEC standards). Cross-compliance standards set the baseline on which voluntary agri-environment payments build.

Agri-environmental measures under Pillar 2 support voluntary commitments for a period of at least five years and which go beyond a reference baseline, including *inter alia* cross compliance. Commitments can cover the following activities: organic farming, integrated production, other extensification of farming systems (i.e. fertilisers and pesticides reduction, extensification of livestock); diversification of crop rotations; reduction of irrigation; action to conserve soil; management of landscape, pastures and HNV; actions to maintain habitats favourable for biodiversity; genetic resources; other targeted actions which for example include the use of integrated environmental planning. To ensure WTO

compatibility payments are based on costs incurred and income foregone, with the possibility of paying for transaction costs in addition.

In addition, following the 2008 Health Check, **Article 68 of Regulation 73/2009** expanded the scope of national envelopes which can be used at the discretion of MS, while keeping the overall 10% share of each Member State's direct payments ceiling. Specifically, under paragraph 1(a)(v), Member States can grant specific support to farmers for specific agricultural activities entailing additional agri-environmental benefits.[5] This introduced the idea of paying for environmental public goods through Pillar 1 for the first time.

The voluntary nature of AEM means that their coverage and environmental impacts vary widely across Member States. In 2009, the agricultural area enrolled in agri-environmental measures amounted to nearly 38.5 million ha and represented 20.9% of the UAA in the EU-27 (DG Agriculture, 2011).[6] This area amounts to 76% of the envisaged target area for the period 2007-2013 (ENRD, 2011). This share was significantly higher in the EU-15 (25.2% or 33.5 million ha) than in the EU-12 (9.7% or 5 million ha).[7]

In 2009, the level of implementation of the agri-environmental measures varied considerably among Member States. The United Kingdom and Germany showed the largest area under agri-environment management with almost 7.8 and 5.9 million hectares respectively. While in Luxembourg (91.7%), Finland (91.4%), Sweden (82.3%) and Austria (69.6%) more than two-thirds of the UAA were enrolled in agri-environmental commitments, in 8 other countries (Portugal, Cyprus, Malta, Romania, Lithuania, the Netherlands, Poland, Bulgaria) this share was below 10%.

In 2009, the most important types of agri-environmental commitments in terms of area enrolled were those aimed at the management of landscape, pastures and HNV farmland which covered around 13.5 million ha and represented 39% of the total area committed across the EU-27. 14% of the total agri-environmental area (almost 5 million ha) is classified in the category "other extensification of farming systems" which includes measures aimed at the reduction or better management of fertilisers and plant protection products and at the extensification of livestock. The category "entry level scheme" which traditionally attracts a large proportion of agricultural holders accounted for 13% of the area enrolled. Around 8% of the total area committed in the EU-27 was devoted to organic farming and the same share was directed to actions to conserve soils. In 2009, the other categories of commitments (such as protection of endangered species, reduction of irrigated areas, creation and upkeep of ecological features and creation of habitats) covered around 17% of the total area enrolled (DG Agriculture, 2011).

Another feature of AEM measures is that there is considerable variability over time in the areas enrolled, depending on the rhythm of programming and available budgets. In 2009 the total number of hectares enrolled in agri-environmental measures was 9% lower than in 2006 in the EU-27 (not including Austria, Bulgaria, Finland, France, Luxembourg,

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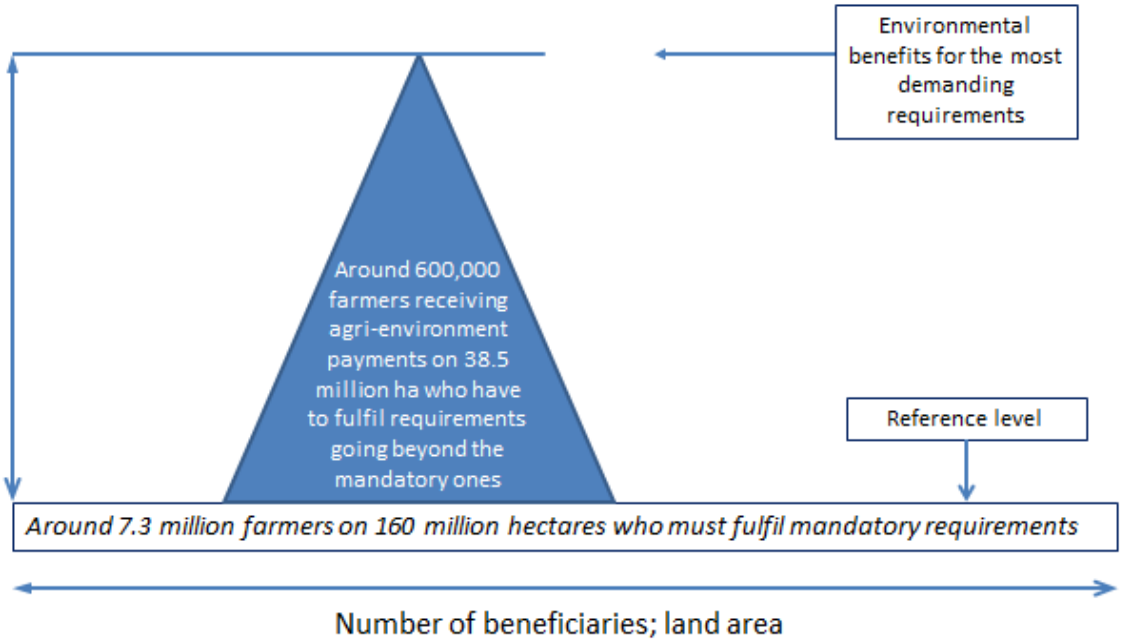
[5] For a list of Member States which have made use of this provision, see DG Agri http://ec.europa.eu/agriculture/direct-support/pdf/implementation-specific-support_en.pdf.

[6] The agricultural area under agri-environmental measures represents the *physical surface covered by agri-environmental schemes* without double counting of areas in which more than one commitment is carried out. The indicator on the physical area has been introduced for the first time in the period 2007-2013 as output indicator of the CMEF of the Rural Development Programmes to improve the quality of the monitoring. It differs from the *total area enrolled in agri-environmental commitments* where the same area can be counted several times if several types of commitments apply on the same land.

[7] Because AEM include support to landscape features, it would be more appropriate to define this output indicator in the coming period with reference to Potentially Eligible Area (i.e. land eligible for payment in the IACS databases) rather than UAA which only refers to land available for agricultural use.

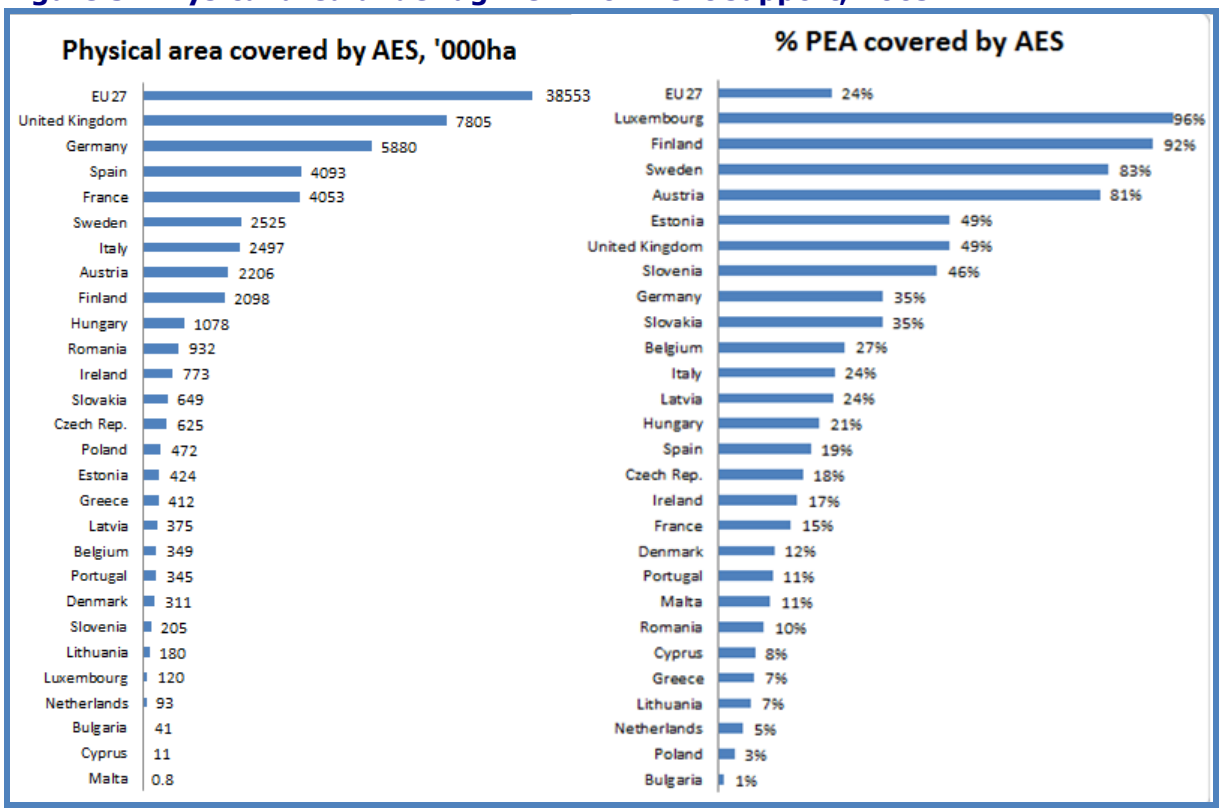
Romania and Sweden for which 2006 data were not available). The area under agri-environmental contracts decreased by more than half in Ireland (61%), Poland (60%), the Netherlands (51%) and Cyprus (65%). On the other hand this area increased considerably in Italy (40%), Spain (20%), Lithuania (43%) and the United Kingdom (16%) (DG Agriculture, 2011).

Figure 2: Relative importance of EU agri-environment measures



Source: Own elaboration, adapted from ECA, 2011. The ECA report referred to 2008 figures. The 2008 figures only include farmers and land enrolled in AEM which began in the current programming period. The number of farmers is the 2008 figure. The land enrolled figure is the 2009 area which also includes land in schemes which began in the previous period and is significantly larger.

Figure 3: Physical area under agri-environment support, 2009



Source: Areas covered by agri-environment payments (AEM) under Measure 214 of Rural Development Programmes from European Network for Rural Development, 2011. The 2009 data include the contracts signed in 2007, 2008 and 2009 under Regulation (EC) No 1698/2005 and the on-going commitments under the former Regulation (EC) No 1257/1999. Potential Eligible Areas (PEA) from Council of the European Union, 2011 (data for 2009); own calculations. Note that in the original source the percentage figure is calculated with reference to the Utilised Agricultural Area in each country.

The degree to which these measures have led to an improvement in the environmental performance of agriculture is a matter of continued debate. Until now, there has been no requirement to monitor and evaluate the impact of cross-compliance measures on the environment. More information is available in relation to the environmental impacts of Pillar 2 measures through mid-term and *ex post* evaluations of past and current Rural Development Programmes and data on indicators within the Common Monitoring and Evaluation Framework. However, the level of detail of the evidence provided varies considerably between Member States, making EU wide assessments problematic (ECA, 2011; OECD, 2011).

Uthes et al. (2011) summarise the literature reviewing the effectiveness of Pillar 2 agri-environment schemes. Because of the absence of an EU-wide assessment, available empirical studies usually focus on single schemes in different study areas. The experience with agri-environmental measures shows that they have had mixed success depending on the schemes and indicators under investigation. There is some evidence that AEM reverse negative trends in bird monitoring data, particularly in diversified, small-scale landscapes. Studies in intensively farmed regions usually reported less successful results and concluded that much more and different conservation efforts are needed. AEM may also have unintended effects. For example, increasing connectivity networks, especially those with corridors, may function as conduits for undesirable species or disease spread.

Uptake is mostly determined by agricultural conditions, that is, farmers are adopting schemes that are most consistent with their particular circumstances; and is therefore more driven by the agricultural supply than by the demand for environmental changes. Due to lower opportunity costs, peripheral, marginal and difficult-to-farm areas are first entered in schemes. This implies that AEM are dominated by already relatively extensively farmed areas, while in intensively farmed regions higher opportunity costs usually prevent large-scale applications.

The operation of Pillar 2 AEMs was sharply criticised in a European Court of Auditors report (ECA, 2011) which examined whether EU agri-environment support was well designed and managed. Member States are criticised because often their rural development programmes do not contain clear environmental objectives. Where objectives are specified, there is often little linkage made between these objectives and the environmental sub-measures to be funded. Where the linkages are made, there is often little attempt made to monitor the impact of the measure, and little information was available on the environmental benefits of agri-environmental schemes. Aid payments to farmers often do not provide the right incentives, either over-compensating farmers in some cases or not compensating enough in other cases to ensure sufficient participation to really make an environmental difference. All of these issues are addressed in the legislation, but clearly there is still some way to go before good practice is routine in the Member States.

For the next programming period the Court recommended that agri-environment expenditure should be more precisely targeted; that there should be a higher rate of EU contribution for sub-measures with a higher environmental potential; that there should be a clear distinction between simple and more demanding agri-environment sub-measures; and that the Member States should be more proactive in managing agri-environment payments.

3.2. Positions prior to publication of the Commission's proposals

The European Parliament took its first position on the current CAP review in its resolution of 8 July 2010 on the future of the Common Agricultural Policy after 2013 based on the own-initiative report of rapporteur Mr George Lyon MEP (European Parliament, 2010). This resolution wanted the vast bulk of agricultural land to be covered by agri-environment measures and called for additional incentives for improved environmental management to be delivered through an enlarged Pillar 2 budget. The idea of a top-up payment is mentioned but in the context of multi-annual contracts linked to carbon reduction/sequestration and biomass products.

Box 1. Extracts from the European Parliament's resolution of July 2010 on the future CAP

A green CAP

53. Notes that the market has failed, to date, to properly reward farmers for protecting the environment and other public goods; therefore believes that the CAP must place a greater emphasis on sustainability by providing proper economic incentives for farmers to optimise the delivery of eco-system services and further improve the sound environmental resource management of EU farmland; emphasises that this should be achieved without creating an extra financial or bureaucratic burden for farmers;

54. Believes that, thanks to improvements in production factors linked to advances in knowledge, farmers are well placed to contribute to green growth and respond to the energy crisis through the development of green energy in such forms as biomass, biowaste, biogas, second-generation biofuels and small-scale wind, solar and hydro energy, which will also help create new green job opportunities;

Sustainability

71. Believes that an EU-funded top-up payment should be made available to farmers through simple multiannual contracts rewarding them for reducing their carbon emissions per unit of production and/or increasing their sequestration of carbon in the soil through sustainable production methods and through the production of biomass that can be used in the production of long-lasting agro-materials;

Biodiversity and environmental protection

77. Believes that farmers can contribute to biodiversity and environmental protection, as well as climate change adaptation and mitigation, in a cost-effective way; this therefore needs to be further incentivised; calls for the CAP to provide the opportunity for the vast bulk of agricultural land to be covered by agri-environmental schemes to reward farmers for the delivery of additional eco-system services while encouraging more sustainable, lower-input production models such as organic farming, integrated agriculture, the development of high-nature-value farming and sustainable intensive agricultural practices; considers that all these rural development measures should continue to be co-financed, with an increased budget if necessary.

Source: European Parliament, 2010.

The Commission's November 2010 Communication on the CAP after 2013 contained the first proposal to introduce a top-up payment in Pillar 1 as part of a greening strategy. Specifically, the Communication proposed:

> "Enhancement of environmental performance of the CAP through a mandatory "greening" component of direct payments by supporting environmental measures applicable across the whole of the EU territory. Priority should be given to actions addressing both climate and environment policy goals. These could take the form of simple, generalised, non-contractual and annual environmental actions that go beyond cross-compliance and are linked to agriculture (e.g. permanent pasture, green cover, crop rotation and ecological set-aside). In addition, the possibility of including the requirements of current NATURA 2000 areas and enhancing certain elements of GAEC standards should be analysed."

Further insight into the Commission's thinking at this time was included in the annex to the Communication which proposed "a compulsory additional aid for specific "greening" public goods through simple, generalized, annual and non-contractual agri-environmental actions based on the supplementary costs for carrying out these actions".

In response to this Communication, the Parliament adopted a further resolution on 23 June 2011 on *The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future* (European Parliament, 2011) based on the report of the rapporteur Mr Albert Deβ MEP. The rapporteur's report was substantially revised in COMAGRI before being presented to the Parliament for its vote. In his draft report dated 15 February 2011, the rapporteur favoured the conditional greening approach to greening the CAP in which eligibility for Pillar 1 direct payments would be conditional on farmers entering a basic level agri-environment scheme in Pillar 2.

Box 2. Extracts from the rapporteur Mr Albert Deβ's draft report of February 2011 on the future CAP

Resource protection and environmental policy component

20. Considers that better resource protection is an element in sustainable farming, which should involve separate support for environmental measures going beyond the requirements of Cross Compliance (CC), which already entail many environmental measures, and being geared to multiannual applications, as a result of which greater environmental benefits can be attained;

21. Considers that resource protection should be directly linked to the granting of direct payments in order to attain these environmental objectives to the maximum without the need to introduce new, bureaucratic environmental conditions into the first pillar; considers that a flat-rate income payment, as envisaged in a top-up model in the first pillar, must cover costs and income losses;

22. Considers therefore that any environmental advantages can be attained more effectively and directly by means of second-pillar measures adopted by the Member States, which should ideally build on existing agrienvironmental measures or should supplement measures which take into account climatic and geographical differences in the Member States; observes that resource protection programmes should be pursued everywhere by means of a priority catalogue of area-based measures in the second pillar which are subject to basic requirements, particularly in the fields of climate, environment and innovation (Annex I), and are 100% EU-financed; regards the greening of direct payments in the first pillar as lying in the fact that any recipient of direct payments in the EU must implement at least two priority area-based resource protection programmes in order to be eligible for the complete farm payment; believes that the administration involved in these measures can be minimised by managing them in accordance with the system of the existing agrienvironmental programmes, thus avoiding duplication of monitoring and additional application and administration procedures.

Source: European Parliament, 2011a

The final resolution of the Parliament, based on the revised report from the rapporteur, moved away from the conditional greening approach to propose a menu-based approach linked to a green direct payment in Pillar 1. It emphasises that the scheme should be applied through simple measures, should balance environmental and economic performance, should be relevant from an agronomic point of view and should not be

discriminatory towards farmers already participating to a great extent in agri-environmental programmes.

Box 3. Extracts from the European Parliament's resolution of June 2011 on the future CAP

Resource protection and environmental policy component

29. Considers that improved natural resource protection and management is a central element in sustainable farming, which justifies, within the framework of the new challenges and objectives of the EU 2020 Strategy, additional incentives to encourage farmers to adopt environmentally sound practices that go beyond the baseline requirements of Cross-Compliance (CC) and would complement the already existing agri-environmental programmes;

30. Believes that natural resource protection should be more closely linked to the granting of direct payments and calls, therefore, for the introduction, through a greening component, of an EU-wide incentivisation scheme with the objective of ensuring farm sustainability and long-term food security through effective management of scarce resources (water, energy, soil) while reducing production costs in the long term by reducing input use; believes that this scheme should provide maximum support for farmers who are engaged or who wish to engage, step by step, more in agricultural practices designed to achieve more sustainable production systems;

31. Emphasises that this scheme should go hand-in-hand with a simplification of the CC system for recipients of direct payments, should be applied through simple measures, should balance environmental and economic performance, should be relevant from an agronomic point of view and should not be discriminatory towards farmers already participating to a great extent in agri-environmental programmes;

32. Rejects the implementation of a new additional payment system that leads to extra control and sanction systems for greening; insists that practical hurdles for farmers and administrative complexity for authorities must be avoided; insists, moreover, that, in order to streamline the administrative procedures associated with these measures, all agricultural controls should be, as far as possible, operated concomitantly;

33. Calls therefore on the Commission to submit as soon as possible an impact assessment of the administrative practicalities involved in the implementation of a greening component; emphasises that environmental measures have the potential to boost farmers' production efficiency and insists that any possible costs and income foregone, arising from the implementation of such measures, should be covered;

34. Takes the view that further greening should be pursued across Member States by means of a priority catalogue of area-based and/or farm-level measures that are 100% EU-financed; considers that any recipient of these particular payments must implement a certain number of greening measures, which should build on existing structures, chosen from a national or a regional list established by the Member State on the basis of a broader EU list, which is applicable to all types of farming; considers that examples of such measures could include:

- support for low carbon emissions and measures to limit or capture GHG emissions
- support for low energy consumption and energy efficiency
- buffer strips, field margins, presence of hedges, etc.
- permanent pastures
- precision farming techniques
- crop rotation and crop diversity
- feed efficiency plans;

35. Believes that the EU has a role to play in meeting the challenges of food security and energy security, and therefore needs to ensure that agriculture plays a full role in meeting both these challenges; believes therefore that it is inappropriate for compulsory set-aside to be included in the list of sustainability measures as proposed by the Commission.

Source: European Parliament, 2011b

3.3. The Commission proposals

The greening element in the direct payments regulation in the Commission's legislative proposals concerns the introduction of payments for agricultural practices beneficial to the climate and the environment. Farmers entitled to the basic payment "*shall observe*" a set of greening practices in return for a per hectare payment. These practices are designed to be simple, universal, non-contractual, annual and beneficial to the climate and the environment. Member States should assign 30% of their Pillar I direct payment national ceilings to the green payment. Based on the projected allocation in the Commission's proposal for the 2014-2020 Multi-annual Financial Framework (MFF) of 42.78 billion euro for Pillar 1 direct payments in 2020, this implies an annual allocation of 12.8 billion euro to the green payment during the latter years of the programming period.

Box 4. Extracts from the draft direct payments regulation relevant to greening

CHAPTER 2

Payment for agricultural practises beneficial for the climate and the environment

***Article 29* General rules**

1. Farmers entitled to a payment under the basic payment scheme referred to in Chapter 1 shall observe on their eligible hectares as defined in Article 25(2) the following agricultural practises beneficial for the climate and the environment: (a) to have three different crops on their arable land where the arable land of the farmer covers more than 3 hectares and is not entirely used for grass production (sown or natural), entirely left fallow or entirely cultivated with crops under water for a significant part of the year; (b) to maintain existing permanent grassland on their holding; and (c) to have ecological focus area on their agricultural area. Farmers whose holdings are fully or partly situated in areas covered by Directives 92/43/EEC or 2009/147/EC shall be entitled to the payment referred to in this Chapter provided that they observe the practises referred to in this Chapter to the extent that those practises are compatible in the holding concerned with the objectives of those Directives.

…

4. Farmers complying with the requirements laid down in Article 29(1) of Regulation (EC) No 834/2007 as regards organic farming shall be entitled *ipso facto* to the payment referred to in this Chapter.

***Article 30* Crop diversification**

1. Where the arable land of the farmer covers more than 3 hectares and is not entirely used for grass production (sown or natural), entirely left fallow or entirely cultivated with crops under water for a significant part of the year, cultivation on the arable land shall consist of at least three different crops. None of those three crops shall cover less than 5% of the arable land and the main one shall not exceed 70% of the arable land.

***Article 31* Permanent grassland**

1. Farmers shall maintain as permanent grassland the areas of their holdings declared as such in the application made pursuant to Article 74(1) of Regulation (EU) No XXX (HZ) for claim year 2014, hereinafter referred to as "reference areas under permanent grassland" . Farmers shall be allowed to convert a maximum of 5% of their reference areas under permanent grassland. That limit shall not apply in the case of *force majeure* or exceptional circumstances.

***Article 32* Ecological focus area**

1. Farmers shall ensure that at least 7% of their eligible hectares as defined in Article 25(2), excluding areas under permanent grassland, is ecological focus area such as land left fallow, terraces, landscape features, buffer strips and afforested areas as referred to in article 25(2)(b)(ii).

2. The Commission shall be empowered to adopt delegated acts in accordance with Article 55 to further define the types of ecological focus areas referred to in paragraph 1 of this Article and to add and define other types of ecological focus areas that can be taken into account for the respect of the percentage referred to in that paragraph.

***Article 33* Financial provisions**

1. In order to finance the payment referred to in this Chapter, Member States shall use 30 % of the annual national ceiling set out in Annex II.
2. Member States shall apply the payment referred to in this Chapter at national or, when applying Article 20, at regional level. In case of application at regional level, Member States shall use in each region a share of the ceiling set pursuant to paragraph 3. For each region, this share shall be calculated by dividing the respective regional ceiling as established in accordance with Article 20(2) by the ceiling determined according to Article 19(1).
3. The Commission shall, by means of implementing acts, set out the corresponding ceiling for the payment referred to in this Chapter on a yearly basis. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 56(2).

Source: European Commission, 2011a

The Commission puts forward two reasons for pursuing further greening through a green payment in Pillar 1. These are the need for universal application of greening measures on all EU agricultural land, and the fact that it makes the greening of the CAP more visible. It may also have been influenced by the perceived political difficulty of increasing sufficiently the Pillar 2 budget to allow a significant increase in the area of land covered by AEM. In his speeches, the Agriculture Commissioner Dacian Ciolos has pointed out the importance of having a "global response on all of the EU's territories to the question of natural resource management, and not just a specific response in certain regions as is currently the case for agro-environmental measures (which fall under the second pillar)".[8]

[8] Reported in Europolitics, "Orientations of parliamentary rapporteur raise concerns", 28 January 2011, http://www.europolitics.info/sectoral-policies/orientations-of-parliamentary-rapporteur-raise-concerns-art293966-11.html.

> "In sum, the greening component of direct payments makes the greening of the CAP more visible and has the merits of broad territorial coverage and uniform application; however, it does not allow for targeting the measures to specific situations (and would thus need to be complemented by better targeted rural development measures), and most importantly it will need to be required rather than offered a pure an incentive for the greening to be effective and credible" (European Commission, 2011b).

Subsequent sections of this note examine the Commission's proposed greening measures and approach in detail. However, it is useful at this stage to highlight five concerns raised in the initial reactions to the Commission's proposals to provide some context for this discussion. These concerns underline the five criteria selected later to evaluate alternative approaches to greening the CAP.

Universal or not. The Commission has emphasised the importance of mandatory participation in the green payment if the measures are to be effective. Strictly, because acceptance of EU direct payments is voluntary (farmers must activate their entitlements if they wish to receive support) the green measures cannot be mandatory in a legal sense. However, there is a lack of clarity in the regulation over whether receipt of the basic payment will be affected by whether a farmer abides by the green measures or not.[9] If the payment is intended genuinely as a top-up payment which farmers can opt into, then it may well lose its universal character depending on how farmers evaluate the payment on offer (which will differ across Member States) relative to the extra burden and costs (including foregone income) that implementing the measures entail. Clearly this would weaken the case for retaining the payment in Pillar 1 given the many advantages there are to making agri-environment payments through Pillar 2.

On the other hand, if implementing the green measures is a condition also to receive the basic payment, then it becomes a form of super cross-compliance and it is difficult to justify the administrative complexity of introducing another payment apart from the argument that it increases the political visibility of a greener CAP. Clarifications given by the Commission suggest that it is taking some kind of intermediate position: farmers not implementing the green measures would, in the first instance, not receive some or all of their green payment, but for persistent opters-out part or all of the basic payment could also be at risk. This position does not give a satisfactory response to the question whether the measures are voluntary opt-in measures or a cross-compliance requirement to receive any kind of direct payment.

Will the approach yield environmental benefits? The difficulty in finding simple, universal and annual green measures that can be applied across the EU as a whole is that they will tend to the lowest common denominator in terms of environmental benefit. This is either because they impose very few additional requirements on farmers beyond what the majority are doing in any case, so there is limited additionality and significant deadweight loss, or because the management practices inevitably must be so general that the additional benefits produced are rather minimal. There seems to be general agreement that, of the three measures proposed, EFAs are the one with potentially the largest gain for environmental public goods. Greater scepticism has been expressed about the additional environmental value which will be achieved from crop diversification and moving the

[9] The Commission's impact assessment notes: "To ensure effective greening, an appropriate sanctioning mechanism should be provided. Reductions and exclusions could as is already the case with current rules for area-related schemes go from a partial reduction to loss of the greening component as well as exclusion taking into account the severity and extent of the irregularity" [IA Annex 2]. Exclusion might be interpreted here as exclusion from the direct payment scheme as a whole.

obligation to maintain the existing area of permanent pasture from the Member State to the farm level.

Administrative complexity. There is a general perception that the CAP is already highly complex for Member States to administer and for farmers to understand. Simplification of regulations has been an objective of CAP reform for some time. It is inevitable that encouraging the production of environmental public goods on farms will complicate farm management and increase bureaucracy in contradiction with the simplification objective (Hart et al, 2011). However, Member States are concerned that the proposals unnecessarily introduce an additional burden in terms of administration, implementation and control for government and farmers.

The 'one size fits all' approach is too rigid. There is a wide diversity of agriculture throughout Europe. CAP instruments should reflect this diversity and not impose rigid regimes throughout which add little to the targeted objective in particular areas. CAP reform, in shifting support from the product to the producer, has given greater management flexibility to farmers over time. These measures appear to reverse this trend by being overly prescriptive in what farmers are required to do. They are not demand-driven and do not respond to the specific environmental needs of particular areas. They do not incentivise farmers to keep improving their 'green' performance over time. They perform poorly in comparison with the alternative of more targeted measures tailored to local conditions.

The proposals are unfair between Member States. Also, uniformity of approach can impose widely different costs on different regions and Member States. Furthermore, the distribution of the greening budget (linked to the overall Pillar 1 national envelope allocated to each MS) is not related either to environmental performance or to differences in the cost of greening for MS.

These themes of universality, additionality, administrative complexity, efficiency and fairness provide the criteria which can be used to evaluate the debate on the Commission's proposals and potential alternatives to pursue a greening agenda. We return to these criteria in the concluding Section 10.

4. ECOLOGICAL FOCUS AREAS

KEY FINDINGS

- Ecological Focus Areas (EFAs) can potentially provide important environmental benefits. For the design of the scheme, it is important to establish whether its primary environmental benefits can be achieved by focusing mainly on less productive land or whether a more uniform distribution of EFAs over the EU land area is required.
- The environmental benefits of EFAs will depend on the area allocated, their location, the quality of management, their spatial connectivity and the provision of advice. Apart from the first, the current proposal does not contain measures to influence these other aspects.
- The effects of EFAs on production will depend on which landscape features, land use and management practices are permitted.
- Issues raised around EFAs include how the base area is defined; permitted land uses; the 7% minimum requirement; treatment of farm structure and scale issues; connectivity and how best to encourage appropriate management.

4.1. The proposal

The Commission proposal is that farmers shall ensure that at least 7% of their eligible hectares, excluding areas under permanent grassland, is ecological focus area such as land left fallow, terraces, landscape features, buffer strips and afforested areas (Article 32(1) of the direct payments regulation). It is empowered to further define the mentioned types of EFA and to add others. The Agricultural Commissioner insists that maintaining an EFA is not set-aside but a measure aiming first of all to preserve biodiversity and to better use the existent landscape features.[10]

Environmental NGOs believe that EFAs have significant potential both to recognise and reward those farmers who have retained environmentally and agronomically useful features on their farm and to drive those who do not have such areas to incorporate them on their land. They have called for the minimum EFA area to be increased to 10% of eligible hectares. On the other hand, a number of Member States have called for the minimum area to be reduced below 7% on the grounds that the Commission proposal is not consistent with the current economic and agronomic reality on farms.

4.2. Evaluation of the proposal

Environmental benefits. EFAs are expected to have a major impact on biodiversity, but also to produce benefits for soil and water quality; climate change mitigation and adaptation; pest control; landscapes; and pollination (European Commission, 2011b).

[10] Dacian Cioloş, Meeting the Challenge, NFU Conference 2012 Birmingham, 21 February 2012.

The extent of additional environmental public goods produced will depend on a number of factors: whether EFAs are rotational; the balance between land left fallow and other types of EFA; the definition of types of EFA (eligible or not, already existing or new ones, etc.); the distribution in space of EFA (parcel level, farm level, etc.); the management requirements (controllability, costs for farmers, etc.), and the link with Pillar II measures (baseline for more targeted complementary measures) (Westhoek et al, 2012).

Generally speaking, a regionally coordinated, more or less permanent green infrastructure would be optimal. However, in the proposals, the individual farmer has a large degree of freedom in implementing this requirement, including annual changes in the location of the EFAs (Westhoek et al, 2012).

Universality. A fundamental question is what is the appropriate scale to achieve the environmental benefits of greater biodiversity? It does not make sense to demand that every parcel of land should be equally biodiverse, but does this mean that biodiversity is a homogeneous good (similar to greenhouse gas emissions) where it is the aggregate total and not the specific locations which is the relevant policy objective? While conservationists will argue that some spatial distribution of biodiversity is important (particularly when the other co-benefits of EFAs are taken into account), is it necessarily the case that the same obligations should be imposed on each farm, regardless of their physical situation and environmental profile?

Certainly, some conservationists believe it is appropriate to talk in terms of the comparative advantage of different types of land to produce either food or environmental services.[11] From a nature conservation perspective, it might seem obvious to target greening measures on the most intensively-managed areas. However, because of the additive effects of the many correlated land use intensity variables, biodiversity on agricultural land declines exponentially with increasing land use intensity. This particular relationship suggests that conservation will be most effective in extensively farmed agricultural areas, because here the potential biodiversity increase per land-use intensity change will be highest (Klein et al, 2011).[12] Switzerland has opted for the universal model in their implementation of EFAs (Section 2.4).

One potential mechanism to minimise the cost of achieving a specific aggregate target level of biodiversity is to create a 'market' in EFAs, following the cap-and-trade principle. There is limited experience in EU agricultural policy of cap-and-trade schemes to date. The

[11] See the remarks of Professor Charles Godfray, Hope Professor of Entomology, Department of Zoology, University of Oxford, to the UK House of Commons Environment, Food and Rural Affairs Committee Greening the Common Agricultural Policy Wednesday 14 December 2011. "… we have to take almost an economic perspective, not only to the food production but to the environmental goods, and think about where the comparative advantage is for different areas of land to produce, for example, ecosystem services or biodiversity. I see 7% in Pillar 1 as a poor way of doing that; I would like to see more modularity - more capability for different countries to maximise the environmental benefits that the same amount of funding could produce. I think it would be a shame, just talking about biodiversity as a subset of the environmental goods, if 7% of high-productivity land was taken out of agriculture for some pretty poor biodiversity return, and you then ploughed up whatever in a wonderful, biodiverse, rich, ancient meadow in the Scottish islands just to keep that farm-level percentage" (Godfray, 2012).

[12] "A general problem with the conclusion that AEM are more effective in extensively farmed regions is that most of the reported positive effects of AEM are maintenance effects. In extensively farmed regions, nutrient loads have historically always been lower. Maintenance of this state is therefore easier to achieve due to better starting conditions. In intensively farmed regions with often large parcels, lack of landscape elements, lacking connectivity between habitats (fragmentation), soils contaminated, and seed banks impoverished, the goal is not so much maintenance but improvement of environmental conditions. With these less favorable starting conditions, environmental effects are more difficult to achieve and at higher cost than in extensively farmed regions. Comparing maintenance and improvement effects is therefore not actually possible" (Uthes et al., 2011).

scheme for trading 'mineral rights' (nitrogen and phosphorous surpluses or deficits relative to an allowable farm-level surplus) that has operated for over a decade in the Netherlands is probably the best known. Each farmer would be given a 'quota' of EFA area that he or she must fulfil, but it would be possible for farmers to trade these areas. Thus, a farm in a highly-productive region might opt to acquire its EFA requirement from a farm in a more disadvantaged region, which might find it more profitable to exceed its EFA 'quota' and sell the surplus to the more productive farmer. Whether this would be a desirable approach or not depends on the extent to which the spatial distribution of biodiversity and other environmental public goods is an important objective. While it may be rather speculative to consider the possibilities of trading a commodity which has not yet been introduced, it can be an important perspective in helping to identify issues to keep in mind when initially designing the scheme.

Administrative issues. Measuring and monitoring EFAs will give rise to additional administration costs for Member States. The implementing regulation will have to give guidance on issues such as the minimum size of terraces and how much of the terraced area should be taken into account along with the retaining feature, e.g. stone wall? What are the minimum and maximum sizes of landscape features such as hedges and tree lines? What will be the minimum and maximum sizes of buffer strips? In the new system, it will be important to know not just whether the element is there, but also for example in the case of a hedge, how wide it is, to see how much it contributes to the 7% EFA requirement.

Another point is that the current definition of 'eligible agricultural area' appears to be interpreted differently across Member States (IEEP, 2011). It seems that in some countries landscape features are included in the Land Parcel Identification System, in others not. This may imply that considerable redrawing of existing maps might be required in some MS to include these features.

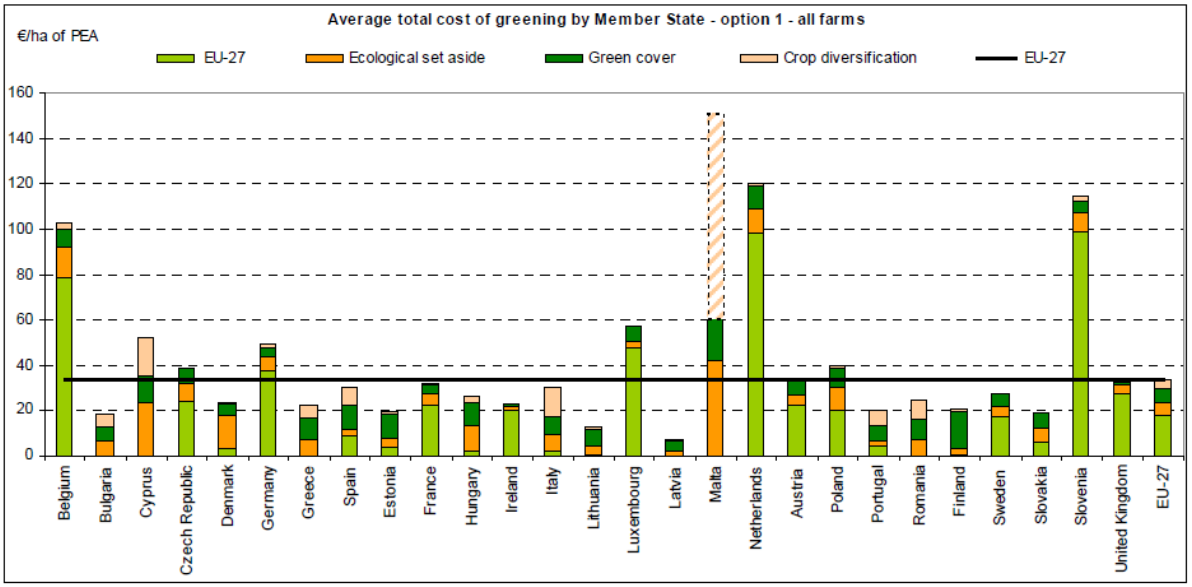
Economic cost. The extent to which EFAs will require land currently in production to be set aside will be highly dependent on what features would be allowed to count towards the total. The Commission's impact assessment was done on the assumption of ecological set-aside where the only land contributing to the requirement was fallow land. Assuming a 5% EFA would require a further 2.3% of land to be left fallow, assuming a 10% requirement doubles the additional set-aside required to 4.6%. The actual proposal is for ecological focus areas, which includes field margins, hedges, trees, fallow land, landscape features, biotopes, buffer strips and afforested areas. This is likely to reduce the amount of land required to be taken out of production compared to the Commission's calculations, although the threshold itself has been raised to 7%. The production effect will always be less than the area effect because the least productive land usually will be used for the EFA first (IEEP, 2011).

The Commission estimates that 46% of farms would have a cost, with the cost per ha varying widely: 14% of farms would have a cost between €200 and €400/ha, but it could be higher than €1500/ha in 1% of farms.

Figures 4 and 5 present the Commission's estimates for the overall cost of the three greening measures proposed, by measure and by Member State. The costs of compliance are quite different from country to country, and different measures are more important in one country than another. Figure 4 expresses the cost over the total land area, while Figure 5 presents the costs only for those farms that are affected. Figure 6 presents a map showing the distribution of the cost burden for EFAs alone. Recalling that the Commission

proposal is somewhat different, its calculations suggest that farms in central and eastern Europe would be most affected by the EFA measure.

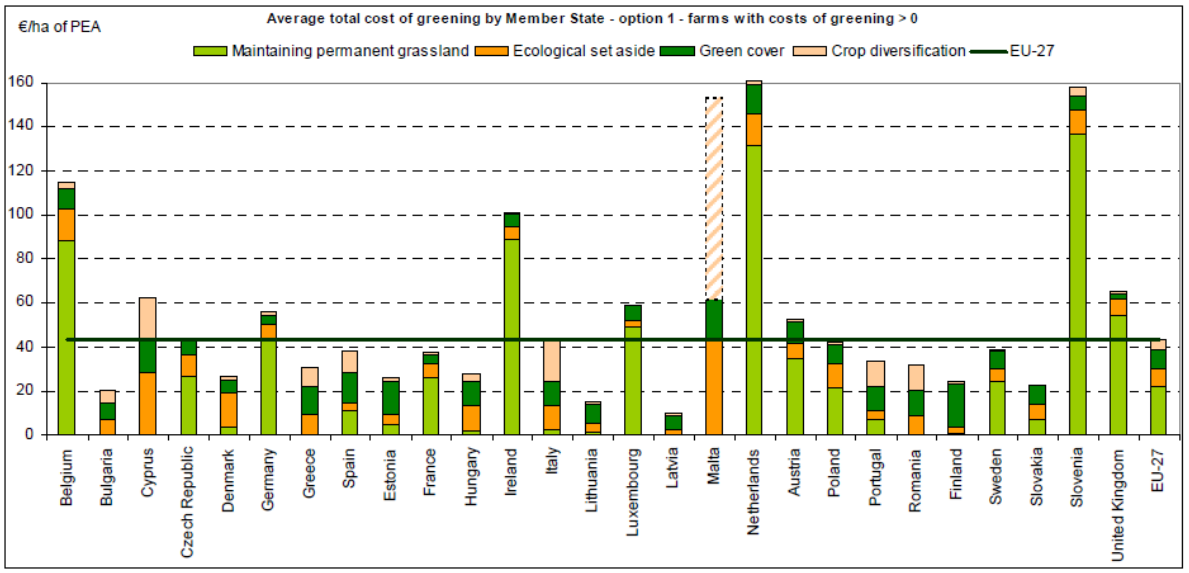
Figure 4: Average total cost of greening by Member State, Option 1 - all farms



Source: DG AGRI L3 calculations based on EU FADN, the AIDS7K model and AGLINK.
*** For Malta, the opportunity cost is overestimated. Total cost of greening should therefore be used with outmost caution.

Source: European Commission, 2011d.

Figure 5: Average total cost of greening by Member State, Option 1, farms with costs of greening

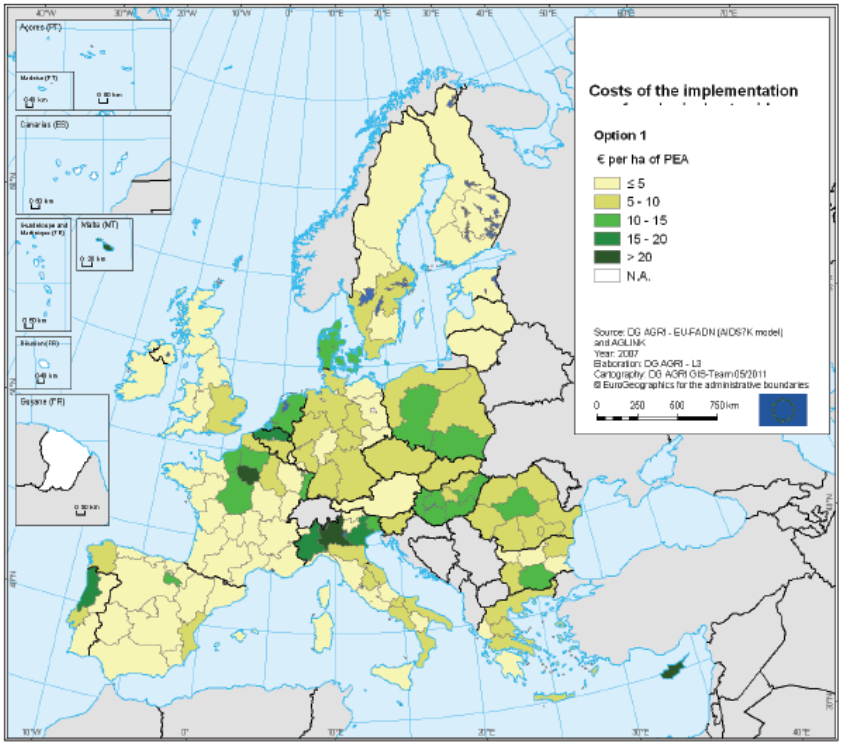


Source: DG AGRI L3 calculations based on EU FADN, the AIDS7K model and AGLINK.
*** For Malta, the opportunity cost is overestimated. Total cost of greening should therefore be used with outmost caution.

Source: European Commission, 2011d.

Figure 6: Estimated cost for ecological focus areas

Estimated cost for ecological focus areas



Source: European Commission, 2011d.

4.3. Issues and potential modifications

Defining the base area. At present this is defined as the farm's eligible hectares excluding areas under permanent grassland. Some countries have suggested that the base area should also include permanent grassland, with the proviso that the overall minimum percentage EFA area would be reduced. Other countries have suggested excluding temporary grassland as well as permanent pasture from the base area, on the grounds that all types of grassland provide 'green' benefits through the provision of a green cover and soil protection.

The inclusion of perennial crops is also contentious. Some perennial crops may be very high value (e.g. vineyards) but precisely because of their intensive cultivation they may provide limited opportunities for biodiversity. Other perennial crops, such as olive groves and orchards, may already represent a relatively extensive form of land use. Lessons might be drawn from the implementation of the Swiss model in addressing this issue.

Permitted land uses. The current proposal does not contain a comprehensive list of desirable land uses and the Commission has the power to identify other eligible features/land uses. Many knotty issues will have to be decided. What kind and what size of afforested areas should be eligible? Should there be a limit on the proportion of afforested land which can count towards a farm's EFA obligation? Will any type of agricultural production will be allowed on EFA land? For land which is left fallow, can any of the biomass be harvested? Are there potentially any kinds of extensive cultures or crops which enhance biodiversity and fulfil several ecological requirements which could be counted as EFA's? While a prohibition on production or harvesting might be easiest to administer and control, there would appear to be some agricultural land uses which may be consistent with the

environmental objectives sought from EFAs (as the examples of low / no input cultivation, land with catch crops or over-wintered stubbles in Buckwell (2012) illustrate).

The 7% minimum requirement. As noted above, the 7% threshold is a controversial one, with stakeholders calling for the figure both to be raised and to be lowered. There seems to be some evidence that, at least within the range of the 7% figure, there is a positive relationship between environmental benefit and the area of land put into EFAs (Buckwell, 2012, quoting a 2008 study showing the percentage increase in skylarks as the proportion of uncropped land increased), although there is also a trade-off between the quantity of land enrolled and the quality of management. Some commentators have argued that at least 10-15% of the UAA of each farm and in all landscapes is necessary to cover the varying requirements of different environmental public goods (Oppermann, 2012). The Commission justifies the 7% figure by saying that it analysed the economic implications of different EFA percentages in the Impact Assessment and that the 7% figure was found balanced in terms of both economic and environmental effects.

Farm structure issues: fragmentation and scale. Many EU farm holdings are fragmented, with a holding made up of land parcels in physically different locations. This raises the possibility that an intensive cereal producer might rent land in a less favoured area to manage as an EFA. Whether this would be considered a loophole or not raises again the issue whether the measure's objective is to ensure a minimum of the total land area managed for environmental reasons, or whether it is important to have a uniform density of these environmentally-managed areas across the whole landscape.

Another issue arises with larger holdings. Is the measure indifferent to whether an EFA on a larger holding is grouped in a single unit or should there be a requirement that EFA areas are diffused across the landscape? Some have suggested that diffusion might be achieved by enforcing the 7% requirement at the parcel level but one wonders if there is good conservation evidence to back this argument.

Connectivity. There is general agreement that the maximum environmental benefit from EFAs would be achieved if these areas can be linked to create ecological networks and promote healthy and fully functioning ecosystems. There is no mechanism currently within the proposed reforms to achieve this, leaving the risk that we end up with a scattering of disconnected fragments of land scattered across the landscape. One possibility to encourage connectivity would be to provide top-up payments under AEM in Pillar 2 to farmers who deliberately associated their EFAs with landscape scale plans, as in the Swiss model (Section 2.4). Another might be to provide specific encouragements to group applications where there is a clearly thought-out management plan.

How to encourage the most appropriate management of EFA areas for environmental benefit? As drafted, the EFA measure is not well suited to incentivising good environmental management because it is a prescriptive measure which farmers will attempt to meet at minimum cost. It may be possible to enhance environmental performance by laying down detailed management practices in regulations, but this would be at the cost of higher administrative, monitoring and inspection costs. Another option would be to focus a particular AEM on ensuring the enhancement of EFA areas. This might raise complex issues of establishing what the legal baseline for EFA management is to avoid double funding of the same agricultural practice in the two Pillars. But such issues have been addressed in the past, for example, when payment rates for particular practices on worked land and on set-aside land differed as in the UK.

Allow the minimum area to vary with the type of management undertaken. One way to encourage appropriate management practices on EFA areas would be to vary the proportion of land which should be set aside as EFA by the type and extent of environmental management which is undertaken on it. For example, the most beneficial practice for biodiversity is the provision of in-field habitats such as fallow land, whereas experience from agri-environment schemes indicates that practices that are limited to field boundaries and margins are most popular with farmers. Because the benefits for biodiversity as well as water quality, soils, carbon storage and climate adaptation could be increased significantly by targeting and appropriate tailoring of management practices on the land concerned, it might make sense to allow that the required EFA size could be offset by the amount of environmental management that takes place on it. Here again, there is a trade-off between greater environmental benefits and administrative complexity.

Equalising environment benefit per hectare. This proposal, which has been championed by the UK among others, would be an alternative way to incentivise appropriate management of EFA areas. Under this variant, rather than setting aside a proportion of their eligible hectares as EFA, farmers would instead be required to deliver a certain amount of "ecological benefit" per eligible ha. This would enable farmers to select those features and habitats which were most relevant to their situation but which, when added together, would have to meet a minimum threshold of ecological benefit. This approach would also add more complexity to the operation of the EFA contrary to the simplification objective. However, it would set a universal environmental ambition for EFA that takes account of both the cost to farmers and the potential level of environmental benefits. If this approach is found attractive, it does not make sense to confine its implementation to just one of the green measures but instead to think of it in the more general context of the menu approach to greening. The menu approach to greening is taken up again in Section 8.

5. CROP DIVERSIFICATION

KEY FINDINGS

- Crop diversification can have environmental benefits but these are likely to be less than for crop rotation, which is ruled out as an annual measure by the Commission for administrative reasons.
- The Commission estimates that the number of farms and, more important, the proportion of the arable area, likely to be affected by this measure is relatively small (a figure of 2% is given in the Commission impact assessment). But there are national studies which suggest that a higher proportion of farms would be affected.
- Issues raised around the crop diversification requirement include: the definition of a crop; the minimum scale of arable area before the requirement applies; how to deal with permanent crops; and the potential for unintended perverse effects on mixed livestock farms.

5.1. The proposal

The Commission proposal is that farmers should have three different crops on their arable land where the arable land covers more than 3 hectares and is not entirely used for grass production (sown or natural), entirely left fallow or entirely cultivated with crops under water for a significant part of the year. None of those three crops shall cover less than 5% of the arable land and the main one shall not exceed 70% of the arable land (Article 30(1)). The current optional GAEC on crop rotation would be removed. More ambitious crop rotation measures could still be funded under rural development.

5.2. Evaluation of the proposal

Environmental benefits. Introducing a variety of crops into production can have a number of positive environmental effects, including benefits for soil organic matter (climate change) and structure; reduction of soil erosion and nutrient leaching; nutrients management and input reduction (nutrients and plant protection products); pest and weed control; water quality and quantity; climate change mitigation and adaptation; improved habitats and landscape diversity (European Commission, 2011b). Many of the potential opportunities for enhanced environmental benefit will depend upon what crops count as 'different', e.g. requiring a leguminous crop would bring benefits in terms of fixing nitrogen and reducing fertilisers and pesticide applications. However, under WTO rules it is not possible to require particular crops as part of a diversification regime if the green box status of the direct payment is to be maintained.[13]

There is general agreement that crop diversification will not deliver the benefits of crop rotation although it could provide protection against large monocultures. A crop rotation requirement, however, is ruled out by the Commission because of the practical difficulties of administering and enforcing this as an annual measure in Pillar I. Because the

[13] This assumes that the payment is notified as a decoupled income support payment and not as an agri-environment payment.

requirement should be checkable on an annual basis, such that one can look in a given year and see if a farmer is complying within that given year, crop rotation was ruled out and crop diversification proposed as a second best solution. Despite this, a number of Member States have introduced a crop rotation requirement as an optional GAEC requirement for annual Pillar 1 payments. Also Switzerland, with a similar system of annual direct payments, requires crop rotation as one of its cross-compliance green measures. The introduction of the requirement to maintain permanent pasture (which requires knowledge of what happened on a particular field over a five-year period) also suggests that the administrative problems of a crop rotation measure might not be insurmountable.

The measure could have some unintended consequences. Consider, for example, a tillage farmer who is renting a different area of land each year. He or she may actually be complying with a rotation objective but, because he or she is just farming one crop at any given time, would not meet the Commission's diversification requirement. Although the farmer is doing fine in terms of rotation, he or she would perversely be caught by this requirement on diversification.

If a farmer's holding consists entirely of (temporary) grassland and permanent pasture (or habitats), it does not have to have three crops. But if the farm has some cropped area, it must have three crops, but temporary grassland can be one of these crops. This could mean that many mixed farms will then devote more than 70% of their area to a single "crop" – temporary grassland – and hence have to consider diversification of their production activities in order to meet the greening requirements. The alternative might be that they decide to move to 100% permanent grassland, reducing the diversity of cropping and the landscape and the benefits that which spring from that.

Administrative issues. Controlling compliance with the requirement for the three crops to cover a minimum of 5% and a maximum of 70% of the arable area at individual farm level will require substantial additional administration, monitoring and inspections, viz., to establish the area covered by each crop as a proportion of the overall holding. In some Member States, a single land use code covers arable crops. It will now be necessary to reintroduce additional codes in order to differentiate between different crop types. No estimates of the likely additional administrative costs have yet been published although no doubt national administrations are busy making their own calculations.

Likely costs. The number of farms likely to be affected by this requirement will depend on the definition of separate crops, which will not be fully clarified until the publication of the implementing regulation. The Commission estimates, on the basis of FADN data, that only a relatively small share of area – 1.4% of PEA - would be affected by this measure, although the number of farms affected would be a little higher – 8% - because it is the smaller farms that are affected disproportionately. For the farms affected, the cost per hectare to be diversified may vary a lot and can be very high. The cost per farm depends on the alternatives available to farmers, which will differ across Member States. A diversification requirement would have a disproportionately large impact on production of specialist crops, including permanent crops that dominate in certain regions. About 7% of farms would have a cost for crop diversification higher than €100/ha to be diversified and more than 1% would have a cost higher than €1000/ha. On average, the cost works out at €6/ha of PEA which is similar to the overall cost of EFAs.

Other estimates put the number of farms likely to be affected rather higher. In the UK, the AHDB has calculated that, in all UK regions, at least 20% of farms would not meet the maximum 70% criterion, and this could be as high as 64% in North Scotland (the

Commission estimate for the UK as a whole was 1.6% of arable land). Part of the reason for the high proportions in the UK exercise is that it is assumed that temporary grass will not be treated as a crop. This needs to be clarified, although the interpretation in this note is that this will be the case. Danish estimates (Lind et al., 2012) suggest that around a quarter of Danish farms with more than 3 ha arable crops would not meet the criterion (the proportion rises to 35-40% for smaller farms under 50 ha) and would be compelled to diversify (again, the Commission figure for Denmark is 1.6% of the arable area). However, it was not possible to establish any significant differences in earnings or profitability due to a putative 'specialisation loss' between farms that cultivated two or less crops and those that cultivated three or more.

Our tentative conclusion is that the likely area of land affected by this measure will depend on how crops are defined but, on the Commission's estimates, is not likely to be large. This raises the question, if less than 2% of land is affected by this measure, whether the associated administrative costs make it worthwhile at all to pursue it (Westhoek et al, 2012). It is also likely that the costs involved will be highly variable. For a country like Denmark where farmers have a variety of alternatives, the costs of compliance may not be significant. But they can rise to very high levels, as the Commission's figures show, for specialist producers.

Implications for fairness. There are clear differences across Member States in the likely cost of these proposals according to the Commission's impact assessment calculations. This has led some Member States to call for more lenient requirements in areas where the costs are relatively high, for example, areas with fewer viable cropping alternatives. Adjudicating on this request again requires taking a position on the vexed question whether it is acceptable that green payments go to farmers for maintaining their current practices (even where there may be no evidence that these are under threat) or whether there should be a comparable effort in terms of additionality across all Member States.

5.3. Issues and potential modifications

What is a crop? Considerable clarification is needed on how individual crops will be defined. Obvious questions include whether spring and winter wheat, or spring and winter barley, are different crops? Cauliflowers, cabbages, and oilseed rape are all brassica so would a farmer have three separate crops, even if there is limited environmental value given that they are all similar species? Will perennial energy crops count as a crop? It seems clear from the wording of the regulation that both temporary grassland and fallow land should count as individual crops, although these definitions as noted can give rise to possible unintended consequences.

The minimum scale of arable area. The Commission's proposal that the diversification requirement would apply to all farms with arable areas above a threshold of 3 ha is criticised as being excessively costly for farms with small arable areas. The implementation of separate sowing, spraying and harvesting regimes for three different crops on such a small area is not very impractical. This threshold could act to discourage these farmers from cultivating any tillage, thus reducing biodiversity benefits in predominantly grassland areas. Alternative proposals suggest drawing the lower limit at an arable area of, say, 15 ha.

In deciding on the appropriate threshold, it is useful to examine what proportions of the arable area might be excluded at various size thresholds. Eurostat produces figures for the distribution of arable crops by arable holding size. Unfortunately, published figures provide a rather crude breakdown of the size distribution (Table 1). There are also concerns that the definition of arable area used by Eurostat is not consistent with that used by Member State administrations in the IACS system. However, the main message is clear. Raising the threshold removes many more farmers than it does the share of the arable area. For example, raising the threshold from 4 ha to 20 ha (these limits being determined by the available data) reduces the proportion of holdings covered by the requirement from 26% to 10% of the total, while the proportion of the arable area covered by the measure would fall from 91% to 76% of the total.

Table 1: Arable crops: Number of farms and areas of different arable crops by agricultural size of farm (UAA) and size of arable area, 2007

	ha: Arable land				holdings: Arable land			
	Total	HA < 4	HA < 20	HA > =20	Total	HA < 4	HA < 20	HA >=20
Belgium	841,920	22,830	191,650	667,680	38,330	11,210	24,450	13,900
Bulgaria	2,663,640	195,740	378,390	2,362,420	334,670	314,840	326,430	8,240
Czech Republic	2,570,880	17,870	81,550	2,500,680	25,120	12,690	17,670	7,450
Denmark	2,452,080	9,000	170,760	2,289,390	41,290	3,250	17,250	24,030
Germany	11,890,450	142,560	1,289,270	10,716,670	271,220	64,820	154,890	116,320
Estonia	626,950	11,560	51,600	582,430	16,560	10,060	13,280	3,290
Ireland	1,007,580	48,320	388,670	661,770	60,960	18,230	45,890	15,090
Greece	2,118,620	483,060	1,786,710	672,800	416,950	294,800	397,130	19,820
Spain	11,882,970	371,300	1,762,880	10,365,550	488,080	258,430	364,800	123,270
France	18,301,980	164,330	1,130,920	17,295,330	376,120	83,780	158,840	217,270
Italy	6,938,830	1,089,040	3,758,380	3,883,720	966,570	685,370	889,330	77,230
Cyprus	107,840	18,180	58,990	59,800	18,840	14,700	17,770	1,080
Latvia	1,110,530	88,430	347,950	822,200	93,490	64,510	85,030	8,470
Lithuania	1,809,380	253,640	731,070	1,246,250	219,380	173,770	206,720	12,650
Luxembourg	61,070	350	6,020	55,340	1,660	150	570	1,110
Hungary	3,552,600	225,420	689,490	2,986,420	335,130	278,500	314,400	20,730
Malta	8,020	6,600	9,950	0	8,390	8,190	8,390	0
Netherlands	1,059,230	37,430	275,740	812,790	52,320	16,900	36,420	15,890
Austria	1,388,640	86,360	510,030	943,330	97,580	43,340	76,910	20,670
Poland	11,755,780	2,384,630	8,469,690	4,889,440	1,999,690	1,433,830	1,917,380	82,320
Portugal	1,077,700	202,350	510,650	674,110	194,850	164,490	186,160	8,680
Romania	8,691,340	3,735,290	7,276,500	3,450,450	3,158,890	2,946,730	3,138,990	19,900
Slovenia	172,950	64,650	160,800	49,580	65,970	58,590	65,050	930
Slovakia	1,357,730	33,620	80,750	1,292,620	45,260	38,680	41,980	3,280
Finland	2,248,060	18,710	315,790	1,949,800	67,320	6,460	29,530	37,800
Sweden	2,626,910	47,440	385,930	2,287,870	71,920	14,370	41,560	30,350
United Kingdom	6,017,540	59,420	405,210	5,657,890	115,890	34,180	61,400	54,500
EU27	104,341,220	9,818,130	31,225,340	79,176,330	9,582,450	7,054,870	8,638,220	944,270

Source: Eurostat ef_alarableaa. The results of the 2010 Census of Agriculture are not yet released for most Member States.

The crop proportions. The regulation requires that none of the three crops shall cover less than 5% of the arable land and that the main one shall not exceed 70% of the arable land. Some stakeholders have suggested that the maximum percentage in respect of the main crop could be increased without losing the beneficial impacts of the proposal. The need to dedicate 5% of land to a third crop is seen to be less significant because those farms producing three crops generally meet this requirement easily. It is not the need for the "third crop" to account for 5% of land that will affect arable farms, it is the requirement to produce a third crop in the first place (AHDB, 2012).

However, the implementing regulation will need to clarify whether the "third crop" is the sum of all land not directed to the main two crops, e.g. the sum of the area of the third and

fourth crop if four crops are planted, which would seem to be consistent with the measure's intention to promote biodiversity.

Another issue is whether the 70% maximum should apply to the crops of temporary grassland and fallow land. The regulation exempts these crops if they apply to 100% of the arable area, but not if they are between 70-100% of the arable area, which does not seem consistent with the aim of the measure.

Permanent crops. The treatment of horticulture, orchards, vines and other crops that differ from crops grown in a natural arable rotation needs to be decided.

Mixed livestock farms. There is a fear that the regulation as presented would have a perverse effect on mixed livestock farms which grow a small amount of fodder, thereby contributing to a more mixed land use in predominantly grassland areas. These fodder areas may be rotated around the farm, but now such farmers would be required to grow three crops if their arable area is over 3 hectares. Many of these farmers might decide that the most sensible way to meet the requirement is to stop cultivating the fodder crop, leading to an outcome opposite to that intended by the measure. More generally, on mixed farms, the larger the area of permanent grassland, the more difficult it is for the farmer to get the green payment: he or she must still grow three other different crops, but on a smaller part of the farm.

Various options might be considered to address this difficulty. A tolerance could be introduced whereby holdings with more than a certain percentage (e.g. 70%) of permanent grassland are exempt from compliance with the diversification criterion.[14] Another option would be to differentiate the requirement so that the larger the share of permanent grassland, the less stringent the requirements for other crops that the farmer must grow on the arable part of the farm.

[14] It is argued that the requirement to set aside 7% of the arable area as an EFA would also act as a perverse disincentive and should similarly be included in any such a tolerance.

6. PERMANENT PASTURE RESTRICTION

KEY FINDINGS

- The Commission proposal would replace the current requirement that Member States must maintain their area under permanent pasture at existing levels.
- Protecting permanent grassland can have benefits for the environment. However, the current definition does not distinguish between valuable permanent pasture which is rarely, if ever, cultivated or re-seeded and is more likely to consist of semi natural vegetation, and less valuable pasture which is periodically cultivated or re-seeded.
- The Commission proposal has a potentially high cost for very limited environmental value. A measure that focuses more specifically on those grasslands of high biodiversity value would be preferred.
- Assuming the measure is retained, the issues raised around the Commission proposal include: the definition of permanent pasture; whether rotation of permanent pasture is allowed; the 5% franchise; and the need for greater focus on high-nature-value (HNV) grasslands.

6.1. The proposal

The Commission proposes that farmers shall maintain as permanent grassland the areas of their holdings declared as such for claim year 2014 (Article 31(1) of the draft regulation). It is also empowered to adopt delegated acts containing the rules on maintenance of permanent grassland, in particular to ensure that measures are taken to maintain the land under permanent grassland at the level of farmers, including individual obligations to be respected such as the obligation to reconvert areas into permanent grassland where it is established that the ratio of land under permanent grassland is decreasing.

This regulation would replace existing requirements that Member States must maintain their area under permanent pasture at existing levels. As explained in Hart and Baldock (2011), there are currently two permanent pasture elements in play under cross compliance. The first operates at the national level and stipulates that the ratio of the land under permanent pasture in relation to the total agricultural area should change by no more than 10% compared to the baseline year. The second is the compulsory GAEC standard for the 'protection of permanent pasture', which operates at the farm level and requires Member States to introduce conditions that protect permanent pasture, but without any requirements for minimum percentages to be maintained. They assess that the way in which this farm level GAEC is implemented is very variable between Member States. The reference area under the proposals would be evaluated on a holding basis rather the present national basis.

Although not a part of the greening measure, a new GAEC on protection of wetland and carbon rich soils is proposed, including a ban of first ploughing on such soils.

Box 5. The existing national requirement to maintain permanent pasture

The direct payments regulation provides that:
The Member States other than the new Member States shall ensure that land which was under permanent pasture at the date provided for the area aid applications for 2003 is maintained under permanent pasture. The new Member States other than Bulgaria and Romania shall ensure that land which was under permanent pasture on 1 May 2004 is maintained under permanent pasture. Bulgaria and Romania shall ensure that land which was under permanent pasture on 1 January 2007 is maintained under permanent pasture.

However a Member State may, in duly justified circumstances, derogate from the first subparagraph, provided that it takes action to prevent any significant decrease in its total permanent pasture area.

The first subparagraph shall not apply to land under permanent pasture to be afforested, if such afforestation is compatible with the environment and with the exclusion of plantations of Christmas trees and fast growing species cultivated in the short term.

The implementing regulation specifies that:
Member States shall, pursuant to the first paragraph above, ensure the maintenance of the ratio of the land under permanent pasture in relation to the total agricultural area. That obligation shall apply at national or regional level.

For the purposes of the second paragraph above, the Member States shall ensure that the ratio referred to in the previous paragraph shall not decrease to the detriment of land under permanent pasture by more than 10% relatively to the ratio for the relevant reference year.

Where it is established that the reference ratio is decreasing the Member State concerned shall, at national or regional level, provide for the obligation of farmers applying for direct payments not to convert land under permanent pasture without prior authorisation.

Where it is established that the obligation to prevent the reference ratio falling by more than 10% cannot be ensured, the Member State concerned shall, in addition, provide for the obligation of farmers applying for aid to re-convert land into land under permanent pasture for those farmers who have land at their disposal which was converted from land under permanent pasture into land for other uses.

Source: Article 6 (2) of Council Regulation (EC) No 73/2009 and Article 3 of Commission Regulation (EC) No 1122/2009.

6.2. Evaluation of the proposal

Environmental benefits. Protecting permanent grassland can have benefits for biodiversity, historic interest, landscape character, climate change and resource protection. The extent of the benefit realised by this greening option depends on the definition of permanent grassland and the management practices permitted. However, what is at issue is whether the additional restrictions on permanent pasture (specifying the restriction at farm rather than just national level) yield additional environmental benefits commensurate with their cost. Hart and Baldock (2011) point out that, because the current national cross-compliance requirement on pasture protection operates only at a national/regional level, it

allows semi-natural grasslands to be ploughed or offset by improved pasture elsewhere, potentially resulting in a significant loss of biodiversity. However, whether this is actually happening is unclear. In any case, if the purpose is to protect the high-nature-value (HNV) grasslands, there are surely more direct ways of doing this.

Permanent grassland is defined as land used to grow grasses or other herbaceous forage naturally (self-seeded) or through cultivation (sown) and that is not included in the crop rotation of the holding for five years or longer (Commission Regulation EU No 1122/2009). This definition does not distinguish between valuable permanent pasture which is rarely, if ever, cultivated or re-seeded and is more likely to consist of semi natural vegetation, and less valuable pasture which is periodically cultivated or re-seeded.

Is permanent grassland under threat? There was a pronounced decline in permanent grassland in the EU at the beginning of the 2000s, but this has reversed since 2006 (OECD, 2011b). This reversal is likely connected with the implementation of the 2003 reform and may have been influenced by the GAEC standard that total grass area is maintained at the national level. Eurostat statistics, however, show that changes in the share of grassland in total UAA vary quite significantly across Member States, and it is possible that one or more Member States may have difficulty in staying above their national reference levels.

Simulations by the OECD (2011b) show that the CAP results in more land in use for pasture than would otherwise be the case. It concludes that, in 2008, EU agricultural policies still induced increases in pasture land at the expense of field crops over what would prevail with undistorted markets, even if this bias has reduced compared to earlier years. This implies that further changes in agricultural policy (e.g. due to either trade liberalisation or a reduction in coupled support) could lead to some decrease in the area of permanent pasture in the future. Future changes in relative prices for crop and livestock products could also lead to incentives for farmers to plough up more of their grassland and convert to arable cropping.

Applied across the EU, the restriction on converting permanent grassland is a highly prescriptive measure which takes no account of the likely environmental benefits relative to the potential costs at farm level. In terms of carbon storage, for example, a change in land use from grass to crops may release a significant amount of soil carbon to the atmosphere, but this will be partially compensated by the associated reduction in animal production which is a significant source of methane and nitrous oxide. As noted above, the biodiversity value of permanent grassland differs significantly depending on the management practices applied.

Some Member States argue that the existing national requirement to maintain the area of permanent grass is well established, simpler to administer and has given rise to no particular concerns about the retention of permanent pasture. Removing the ability to substitute grassland across farms while maintaining the national reference level unnecessarily increases the overall economic cost of the measure. Some of the economic cost bears most heavily on smaller holdings, particularly if rotation of permanent pasture is allowed. This can be seen by comparing the restrictions on 10 individual farms with 100 ha each, each of whom now would have an obligation to maintain the area of permanent pasture on each farm. If these farms merged into a single holding with 1000 ha, this would have the ability to rotate the area of permanent pasture around the whole area while still remaining in compliance.

Economic costs. When divided by total PEA, the average cost would amount to €17/ha of PEA which is the highest among the analysed measures and accounts for half of the total cost of greening (estimated at €33/ha of PEA). The Commission estimates that the area with opportunity cost to maintain grassland corresponds to 8% of total PEA. 84% of farms would not have any opportunity cost to maintain permanent grassland (when there is no permanent grassland or when no alternative is detected). However, for the remaining 16% of farms, the opportunity cost per ha of permanent grassland may vary a lot and can be high. The cost of maintaining permanent grassland in areas where an alternative use of land exists varies between €4 and €620/ha, with an EU average of €216/ha of grassland. It is between €200 and €400/ha for 6.6% of farms and between €100 and €200/ha for 5.9% of farms.

There is reason to be sceptical of these estimates. First, no account was taken of the existing CAP limit of 10% on ploughing up permanent grassland, applied at MS or regional level. Thus, at best, the estimate is of the total cost of preventing a reduction in permanent grassland, rather than the additional cost of moving from a national to a farm-level reference. Second, the methodology calculates an option value, assuming that all land which could economically be converted to arable crops would be.[15] It is not evident, even with higher relative crop prices or reduced support to animal production, that this is a realistic option. Third, the calculation does not factor in that farmers will be able to convert up to 5% of their permanent grasslands. Fourth, the estimate is very sensitive to the rather heroic assumptions made and to different relative prices in the future. While these caveats suggest that the Commission estimate may be an over-estimate, the main point remains. If the purpose of the measure is to protect HNV grassland, is there not a more direct and less costly way of achieving it?[16] (The option of a HNV grassland premium is discussed in Section 8.2).

Administrative feasibility. There are concerns that setting an obligation to maintain the area of permanent grass at an individual farm level through a historical reference would be complex to implement. It will require Member State administrations to be aware of the land use history of every transfer of land between farmers in order to know if this land is permanent grassland or not (in order to update the references of the two farmers concerned). On the other hand, there are potentially similar obligations arising from the current regulation.

6.3. Issues and potential modifications

Assuming the measure is retained as proposed by the Commission, a number of subsidiary issues arise.

Definition of permanent pasture. A number of environmental NGOs are unhappy with the current definition of permanent pasture, in part because it appears to allow grass-to-grass reseeding and in part because it may unintentionally exclude certain areas of biodiversity-rich grazing land as well as wooded pastures. The European Forum on Nature Conservation and Pastoralism has proposed that the definition of permanent pasture should

[15] The methodology assumes that land with poor soil quality will have no opportunity to convert, and that for permanent pasture with an opportunity to convert, the opportunity costs are 2/3rds of the difference in gross margins between permanent grassland based dairy and beef production systems and alternative systems at regional level.

[16] Westhoek et al. (2012) conclude that "the added value of the permanent grassland requirement will probably be limited".

be "land used to grow grasses or other herbaceous forage (selfseeded or sown) and that has not been included in the crop rotation of the holding ploughed or reseeded for 5 years or longer" (EFNCP, 2012).

Degree of flexibility. Will it be fixed by field or will some rotational flexibility be allowed?

2014 date. There is a fear that the proposed reference year of 2014 could actually incentivise the ploughing of grassland by encouraging landowners to cultivate their pasture before this date. The Commission has indicated that it intends to roll forward the current cross-compliance rule on permanent pasture in order to mitigate this. An alternative might be to change the reference year for the baseline to 2010.

5 per cent franchise. Raising the franchise at farm level could provide some additional flexibility, while the national reference level could be maintained.

Modify the current national reference to address the concerns of the greening measure. Given that Member States are familiar with administering the existing national reference level, one option would be to retain this standard but with the default position of introduction of regional or individual farm level requirements in the event that the national average fell by more than the 5% tolerance allowed. An alternative would be to retain permanent grassland as part of cross compliance (as in the current arrangements) but with a tighter definition to identify grassland of specific environmental value.

Greater focus on high-nature-value grasslands. The current definition of permanent pasture fails to distinguish between intensive grass crops and extensively managed grasslands of the highest environmental value. The main benefit of moving the reference restriction from the national to the farm level is to increase the implied protection for HNV grasslands. But this is a very indirect measure, and these grasslands would continue to be under threat from intensification even with this restriction in place.

Far better to tackle the problem of protecting biodiversity-rich grasslands directly. This could be achieved through a premium for the grasslands with the highest environmental value. Such a measure would be a new addition to the green measures in the Commission's proposal and is considered further in Section 8.

7. CROSS-CUTTING ISSUES

KEY FINDINGS

- The Commission proposes that 30% of the direct payments budget should be allocated to greening which appears to be an arbitrary figure. It would be desirable to allocate funds to achieve agri-environmental objectives on the basis of their costs as is done with AEM in Pillar 2. Given the wide observed cost differences between Member States of the greening measures, this would argue for funding these schemes through Pillar 2 rather than Pillar 1.
- Environmental pressures, existing environmental performance, the costs of compliance and the value of the Pillar 1 green payment will all differ across Member States, raising complex issues of fairness and equity.
- Effective monitoring and evaluation methods will be essential to assess the on-going effectiveness of the greening measures.
- There is a danger that the Commission's proposals could risk that the green payment would not be considered a green box payment.
- Assuming Pillar 1 greening goes ahead, there is a need for a clear distinction between cross compliance, Pillar 1 greening and Pillar 2 agri-environment schemes.

This section discusses a number of cross-cutting issues which arise in evaluating the Commission's proposals. These include the rationale for the budget proposed, fairness across Member States, what might happen to unused payments, the link with the flattening of direct payments, administrative issues and the simplification agenda, their WTO compatibility, the small farm exemption and the implications for Pillar 2 schemes.

7.1. The budget available – why 30%?

Some stakeholders have questioned the justification for allocating 30% of Member State direct payment national ceilings to the green measures, and some have called for this figure to be reduced. In the Commission's November 2010 Communication, it proposed that the additional aid would be based on the supplementary costs for carrying out the greening measures. Not surprisingly, given the variation in the greening costs across farms in the EU as shown in the impact assessment, this approach was abandoned in the later proposal. It would be desirable to allocate funds to achieve agri-environmental objectives on the basis of their costs as is done with AEM in Pillar 2. Given the wide observed cost differences between Member States of the greening measures, this would argue for funding these schemes through Pillar 2 rather than Pillar 1. Given that the 30% is an arbitrary proportion, the debate on the appropriate figure if greening is retained in Pillar 1 will be a heated one.

7.2. Fairness across Member States

Not only are environmental pressures and the costs of greening different across MS, but a consequence of allocating a fixed percentage of each Member State's national ceiling to the green payment is that the allocated compensation for greening in absolute terms per ha

will also differ between the MS. The appropriate distribution of national ceilings between the MS is a contentious issue in the current negotiations on the future CAP because of the significant differences that would remain in the levels of direct payments per potentially eligible hectare even if the Commission's proposed distribution key were accepted. These differences in direct payment amounts per hectare translate directly into differences in green payments per hectare. The case is made by those Member States that are disadvantaged by this arrangement that the value of public goods across Member States is comparable, but while the cost of compliance with the greening measures differs as does the value of the greening payment, these two bear no relationship to each other.[17] One proposal is to establish a green payment of equal value per hectare in all Member States. Based on the Commission's proposal for the next MFF period, this would be a payment of approximately 80 eur/ha in each MS.

7.3. Monitoring and evaluation

The Commission has emphasised the importance of the political visibility of greening to justify the continuation of direct payments to farmers in Pillar 1, but ultimately it is the environmental visibility of the results of these payments that will count. Effective monitoring and evaluation methods will be essential to assess the on-going effectiveness of the greening measures.

The Commission proposes to extend the Common Monitoring and Evaluation Framework to include all instruments related to the monitoring and evaluation of CAP measures. Thus, monitoring and evaluation would also cover direct payments, market measures and the application of cross compliance as well as rural development. The set of indicators specific to these objectives and areas will be defined by the Commission by means of implementing acts. The indicators established for Measure 214 agri-environment payments in rural development programmes in the 2007-2013 period are presented in Annex 2. These indicators, and particularly the impact indicators, would presumably be the minimum set of indicators used to monitor the green payments in Pillar 1.

The Commission has highlighted that the potential application of agri-environmental indicators to assess progress in the integration of environmental concerns into the CAP is limited due to the complex links between policy measures, changes in farming practices and environmental improvements, and numerous other intervening factors (European Commission, 2006). The Commission is working on the development and improvement of the agri-environmental indicators. A set of 28 indicators is under development, in close cooperation with the Member States (the progress on these indicators, including data where available, is gathered on a dedicated Eurostat website, see http://epp.eurostat.ec.europa.eu/portal/page/portal/agri_environmental_indicators/introduction). If the CAP budget devoted to greening is increased, then making progress with this work becomes even more important.

[17] See Dobrzyńska, N., Ministry of Agriculture and Rural Development, Poland, Presentation to LUPG meeting 6 March 2012. The assumption that the value of environmental public goods is the same in all Member States strictly only applies to EU-wide public goods. Primarily local public goods can have very different values depending on their relative scarcity and the preferences of local populations.

7.4. Unused green payments

This note has previously underlined the ambiguity in the Commission's proposal whether the greening measures will be really mandatory (implying that they operate as a form of super cross compliance) or whether they will operate on an opt-in basis, in the sense that farmers who do not wish to participate simply forego the green payment but continue to receive the basic payment.

If the latter, there potentially could be a significant share of the 30% of a MS national ceiling allocated to the green payment left unused. The Commission proposal is silent on what might happen to this money. Would it be returned to Brussels? Would it be available to MS to transfer to use to fund AEM in Pillar 2 (in addition to any voluntary modulation of direct payments they might previously have agreed to)? Or would it be used to top up the basic payment, which would further decouple the overall national ceilings from any environmental objective?

7.5. Implications for flattening

The fact that the green payments would be paid as an absolute amount per hectare from the first year of the new scheme has implications for the pace of transition to uniform regional payments within each MS. For those MS currently operating the individual historic reference, the allocation of 30% of the national envelope to flat-rate green payments will have a major and front-loaded impact on the movement to uniform national or regional payment rates.

7.6. Administrative issues and the simplification agenda

Attention has been drawn to the administrative implications of the three green measures in their respective Sections. This part of the note is used to highlight some more general issues.

Inspection and enforcement of the greening measures will inevitably incur new administrative burdens and add technical complexity due to the creation of a separate envelope and separate conditions for greening. The proposal would require two separate payment regimes under pillar 1 direct payments and three separate control regimes – land eligibility, cross compliance and greening – with different sanctions applicable to each. Effectively, this would be a substantial reversal of the simplification achieved under the current Single Payment Scheme.

The Commission addressed the issue of administrative costs in its impact assessment (European Commission, 2011b). It noted that the current system as regards decoupled payments relies on two layers: 100% computer-based cross checks (Land Parcel Identification System) and 5% on-the-spot checks. With the introduction of the greening component, the system will rely more on on-the-spot checks, thus higher costs for controls. However, where possible, the use of remote sensing for on-the-spot checks could help keep costs down compared to field visits. It noted that remote sensing is more appropriate where simple areas must be calculated but would be difficult to use if specific maintenance requirements must be enforced.

The impact assessment also noted that, to ensure effective greening, an appropriate sanctioning mechanism should be provided. The Commission proposes payment reductions not exceeding 5% for negligence, 15% for repeated non-compliance and no less than 20% for intentional non-compliance, although if there is a more severe breach this could "*go as far as total exclusion from one or several aid schemes or support measures for one or more calendar years*." In addition, MS can impose further penalties by withdrawing payments for which the beneficiary does still meet the conditions, i.e., farmers failing to implement greening measures could lose other payments as well. However, as Birdlife (2011) observes, the financial motivation for MS to robustly enforce cross compliance remains very weak; the Regulation proposes a reduction in the proportion of receipts from non-compliance that can be retained by the MS from 25% to just 10%. In contrast, cancelled Rural Development payments funded from the EU budget are reallocated back into the relevant RDP.

7.7. WTO issues

An important consideration in evaluating the Commission's proposals is how the payments would be classified with respect to the EU's WTO obligations under the Agreement on Agriculture. Swinbank (2012) argues that the Commission's greening proposals could be in danger of infringing the green box requirement that no production is required to qualify for payment. Nor would the greening component appear to fit within the green box exemption for payments under environmental programmes.

The Commission is clear that the green payment, as formulated, would not be eligible to be classified as an agri-environment green box payment because it would not meet the condition that the payment should be related to 'the extra costs or loss of income involved in complying with a government programme' (European Commission, 2011b) (Swinbank adds that it also would be disqualified because it is not paid as part of a clearly-defined government environmental or conservation programme). Instead, it would intend to report the payment as a decoupled income support payment.

Paragraph 6 of Annex 2 of the Agreement on Agriculture addresses the conditions necessary for a payment to qualify as decoupled income support. Of particular relevance is sub-paragraph (b), *The amount of such payment in any given year shall not be related to, or based on, the type or volume of production (including livestock units) undertaken by the producer in any year after the base period.*

In Swinbank's view, the green payments could be challenged as in breach of this condition:

> "To qualify for the greening element (and the basic payment too, if greening is mandatory), non-organic arable farmers have to grow 3 crops, none of which can occupy more than 70% of their arable area, or less than 5%, and maintain the existing permanent grassland on their holdings (European Commission, 2011d, Article 29). Again, this seems to fly in the face of the provisions of Paragraph 6; and **it is difficult to see how expenditure on the greening component could be declared under Paragraph 6** (or under 'other' direct payments to producers under 5)."

These issues would only be decided as part of a WTO adjudication process. Even experienced international trade lawyers (of which the author is not one) differ in their views on how a dispute panel might rule in any specific case. In my view, the EU might have a plausible defence of the crop diversification measure. Much would hinge on how the phrase

'type of production' would be interpreted by a panel and the Appellate Body. It is clear from the *US-Upland Cotton* case that 'type of production' can refer to a specific crop, in that case, fruits and vegetables. But would it also refer to the production process, namely, a requirement to cultivate a minimum of three crops if a farmer engaged in crop production in the first place?[18] Traditionally, the WTO has avoided making judgements on production processes, except where they affect the characteristics of the product as in the case of production processes with potential food safety implications. Crop diversification does not have such implications and might therefore be seen as consistent with paragraph 6(b) in Annex 2.

This defence is not available to the permanent pasture measure which clearly does direct a specific use of the land. The EU might argue that the measure directs farmers to maintain land in a particular use but does not, in itself, mandate that this land must be used for production. Thus, it should not run foul of paragraph 6(b). However, as Swinbank (2012) notes, the requirement that land should meet GAEC standards could prove problematic if it could be inferred from this that some agricultural production is required. For example, an optional GAEC standard allows MS to specify a minimum stocking rate on grassland which clearly has a production effect.

There are thus clear dangers that the Commission's proposals could risk that the green payment would not be considered a green box payment. Swinbank also raises the possibility that, if the basic payment can only be claimed if the greening conditions are met, then it could put even the basic payment at risk as a green box measure.

Of equal significance is what the Commission's approach of placing the green payment in Pillar 1 implies for what it can ask of farmers and achieve for the environment. A payment requiring a minimum stocking density, or a condition to grow a leguminous crop, could be defended as an agri-environment green box payment regardless of these production links provided that the payment only covered the farmer's costs of compliance and that it was part of a clearly-defined government environmental or conservation programme. Thus, going down the Pillar 1 route narrows the options in terms of greening measures due to WTO concerns.

7.8. The small farm exemption

The Commission proposes that farmers participating in the small farms scheme should be exempted from the green measures otherwise required for eligibility for (at least) the green payment. This is justified on simplification grounds, as it avoids the need to monitor and control these practices on a significant number of holdings which may control a relatively small land area (as the figures in Table 1 suggest). Some concerns have been expressed. It undermines the rationale for the green payment as a payment to farmers to encourage them to adopt more sustainable farming practices if for some farmers it is just basic income support. The same simplification might be achieved by inserting the appropriate thresholds into the individual measures themselves (for example, the 3 ha limit for crop diversification). These farms would still have to meet the baseline if they wished to enrol in an AEM, i.e. they could not request an additional AEM payment to cover the additional costs of Pillar 1 green measures. On balance, the gains from lower administrative costs and the

[18] As a thought experiment, payments to organic farmers are currently justified as an agri-environment payment based on compensation for additional costs and loss of income foregone. If, instead, a WTO Member paid a general premium to organic producers, would this qualify as a legitimate decoupled income support under the WTO rules?

relatively small land area likely to be involved outweigh any fears about undermining the philosophy of the payment and the exemption should be supported.

7.9. Implications for Pillar 2 schemes

Assuming Pillar 1 greening goes ahead, there is a need for a clear distinction between cross compliance, Pillar 1 greening and Pillar 2 agri-environment schemes. This is addressed by the Commission in its impact assessment (European Commission, 2011).

> "There are many cases where rural development measures add value by being more ambitious or better tailored to the local situation, by being part of a package of measures, or by encouraging connectivity of environmental features between farms. Therefore, the possibility should be offered to grant support under rural development to measures that go beyond the greening component. It should be noted that similar measures to those foreseen as part of the greening component represent today a significant share of agri-environment commitments in some programming areas. This is particularly the case in the EU12 partly due to lack of experience and capacity to implement more complex measures. However, most new Member States have in the meantime acquired experience, and may be further helped in this process."

Specific ways of linking greening in Pillar 1 with Pillar 2 schemes are discussed later in Section 9. In this part of the note, we highlight the implication that raising the baseline for Pillar 2 schemes might make them less attractive to farmers if they have to engage in more ambitious measures for a similar payment. As AEM in Pillar 2 usually cover a more comprehensive set of green measures than what the Commission proposes in Pillar 2, the net result might be a decline in the supply of environmental public goods, contrary to the intention of the proposal.

This is a particularly important point in the context of the proposal for a menu approach at farm level in Pillar 1 (see the discussion in the following Section 8). Assuming that this were practical (and I argue in Section 8 that this is unlikely), presenting a range of greening options in legislation from which farmers could choose for a Pillar 1 payment would greatly complicate the definition of the baseline for Pillar 2 schemes. For example, assume that a measure is offered to farmers in a particular country as part of the menu of green options for the Pillar 1 payment, but that a particular farmer decides not to opt for this measure but chooses other measures in order to gain eligibility for the Pillar 1 green payment. Would this farmer then be barred from receiving a payment for this measure if he or she enrolled in a Pillar 2 AEM on the grounds that this was now considered part of the baseline for cross-compliance? By implication, the wider the menu offered to farmers in Pillar 1, the narrower the range of options that would remain available to farmers in Pillar 2. It is likely this would destroy the attraction and viability of more effective Pillar 2 schemes.

It will also be important to make provision for transitional measures for those farmers currently in AEM schemes, for example, by grandfathering their payments and current conditions until the end of their contracts, or by permitting farmers currently undertaking multi-annual commitments to terminate them without loss of income.

8. ADDING FLEXIBILITY TO THE COMMISSION PROPOSALS

KEY FINDINGS

- There are few other potential candidates which could be considered as 'simple, generalisable' Pillar 1 measures either in combination with or as a replacement for the three proposed by the Commission, but they include crop rotation and a premium for HNV grassland.
- A menu approach has the advantage of giving greater flexibility to Member States, but at the risk that farmers in different countries would be treated differently. Menu schemes are easier to administer in Pillar 2 rather than Pillar 1
- The organic farming exemption in the Commission proposals has led to calls to allow other categories of farmers to be 'green by definition' and thus eligible for the green payment but exempt from the specific measures required. Such exemptions would not provide taxpayers with any additional environmental goods, are open to legal objections that they involve a double payment for the same practices, and could put the WTO classification of existing payments at risk. It therefore does not seem to be an appropriate route to follow in designing green payments.
- Making the green measures part of GAEC standards (effectively what is implied if the green payment is mandatory) is a possible approach to offer flexibility to MS while minimising administration costs and remaining within the constraints of greening the CAP through relatively undifferentiated, broad brush measures undertaken by all farmers.

8.1. The proposals

This section considers four different options which would provide greater flexibility to Member States on the greening measures their farmers would be required to undertake to become eligible for the green payment in Pillar 1. The options are:

- The introduction of further 'simple, generalisable' greening measures
- Allowing MS to define their own menu of measures
- Extending the organic farming exemption (also called 'green by definition')
- Including the green measures as part of GAEC standards

Adding further simple and generalizable greening measures to the three proposed by the Commission does not add flexibility per se. These measures can be evaluated on their own merits either as additions or replacements for the Commission's proposals.

However, considering a wider range of measures opens the door to the menu approach which would allow MS to choose between a selection of options meeting some minimum level of environmental ambition. Farmers would receive the green payment if they met the green conditions specified by their MS.

Alternatively, more flexibility could be given by generalising the automatic qualification of organic farmers for the green payment on the grounds that they are deemed to provide at least an equivalent measure of environmental public goods. This option is referred to as the 'green by definition' approach. MEPs may wish to explore whether there is a case for including a wider set of criteria other than being an organic farmer which might qualify a farmer to automatically receive the green payment without necessarily complying with the green measures proposed by the Commission.

The final option giving flexibility to MS would be to add the green measures to the GAEC standards where MS have some discretion on how the standards are implemented. This has the attraction that it does not require the creation of any new payment tier and builds on systems that are already in place in the MS.

Of course, these options are not mutually exclusive and it would be possible to combine elements into an overall package.

8.2. Additional 'simple, generalisable' green measures

Crop rotation. Crop rotation is widely valued for its ability to maintain soil fertility, reduce pesticide dependency, increase habitat diversity for wildlife and reduce farming vulnerability to pest, climate and market risks. However, as the Commission impact assessment noted, crop rotation needs to be tailored to local conditions (soil, crops, climate, market outlets) and farming systems; it is therefore difficult to come up with an EU-wide definition that is sufficiently specific. Typical rotations are usually associated with types of farming systems (e.g. livestock farming systems depend on the use of land for grazing and forage crops) (European Commission, 2011b).

There has been experience with crop rotation standards in the EU and outside. The Commission reports that experience with standards for crop rotation (the previously compulsory but now optional GAEC on soil organic matter) showed the reluctance of many Member States to define standards which would affect income and the 'freedom to farm'. In addition control issues played a role. Crop rotation (including crop diversification, sequence and break crops) has also been an element in 20 RDPs funded through Pillar 2 in 9 Member States with premiums from EUR 20-30 to EUR 300 (European Commission, 2011b).

Crop diversification would generally be seen as a second-best alternative to crop rotation which, as a multi-year commitment, the Commission deemed too difficult to monitor in a scheme of annual payments. In this context, it is noteworthy that Switzerland requires crop rotation as one of the six sets of rules required to show proof of environmental performance for eligibility for its scheme of annual direct payments. Interestingly, this also includes a crop diversification element. In order to avoid monoculture, and to maintain the fertility of the soil and good quality of plants, an annual crop rotation plan must be devised which includes at least four different crops. There are rules for the maximum proportion of the main crops (*e.g.* 66% cereals, 40% maize and 25% potatoes). On farms with more than 3 hectares of open land, the main crops must occupy the majority of land under rotation; pauses between crops may also be stipulated (OECD, 2010).

It may be that the greater diversity of cropping systems in the EU means that the Swiss experience is not a good model. Nonetheless, the support of COPA-COGECA for an expanded list of green measures including both annual and multi-annual measures (in the latter case the farmers' commitment would be multiannual but the payment would be made

annually) should be noted in this context (COPA-COGECA, 2011). It would seem that further investigation of this option might be warranted before it is totally ruled off the agenda.

Green cover. Green cover was one of the options examined in the Commission impact assessment. Green cover is the temporary plant cover of land that would otherwise remain bare at certain times in the year. Its contribution to environmental enhancement includes benefits for water quality (esp. reduction of nitrate leaching); soil quality, moisture and reduction of erosion; climate change mitigation (increase in soil organic matter and reduction in chemical fertilisers) and adaptation; and flood prevention. For this reason, a minimum quantity of vegetation cover during rainy periods may be required under the Nitrates Directive. There are also compulsory GAECs for soil erosion requiring minimum soil cover and minimum land management reflecting site specific conditions whose implementation is primarily focused on erosion vulnerable zones.

The Commission's proposed measure was that [70%] of land at farm level (arable, open air horticulture and permanent crops) covered from [15 November] to [15 February]. However, it was excluded from the final proposal because it would require an additional control and would delay payments to farmers, apparently because it would require inspection and controls in the autumn when payment agencies are trying to make their payments.[19] There seems to be little enthusiasm to re-introduce it as a universal measure in Pillar 1, but it may have a role in menu approaches discussed later.

Strengthened focus on HNV grassland. The need for measures to prevent the loss of high-nature-value farmland is widely acknowledged. Typical high-nature-value (HNV) farmland areas are extensively grazed uplands, alpine meadows and pasture, steppic areas in eastern and southern Europe and dehesas and montados in Spain and Portugal. Because these are low-intensity systems that tend to generate relatively low incomes from the market and also to receive the smallest Pillar 1 direct payments, farmers of these lands are faced with either having to intensify their level of activity or to abandon the land – both paths are major causes of biodiversity loss. Possibly over 30% of farmland in the EU may be HNV farmland.

Environmental NGOs have called for a targeted Pillar I payment to provide support for extensively-managed and environmentally-valuable permanent pasture so that these pastures are not only protected but also financially supported (e.g. EFNCP, 2011).

Green growth measures. A series of 'green growth' measures has been proposed by COPA-COGECA as an alternative to the measures in the Commission's greening proposal. These organisations propose an EU list of measures from which farmers could make a choice based on their own farm situation. The proposed implementation for the 'green growth' measures means that they fall into the 'menu' category discussed later in this section. What is useful here is to highlight the type and range of measures which these organisations have in mind.

COPA-COGECA group 'green growth' measures into three main themes: resource efficiency, particularly of nutrients and water; carbon sequestration in agricultural soil and biomass; and reduction in GHG emissions. Within these themes it identifies measures which contribute both to competitive and efficient production (maintaining production capacity, resource efficiency, productivity growth) as well as having a positive impact on the

[19] Dacian Cioloș, Meeting the Challenge, NFU Conference 2012 Birmingham, 21 February 2012.

environment beyond statutory requirements (e.g. on biodiversity, water, soil/air quality and animal welfare).

In COPA-COGECA's view, the measures should be voluntary, with payment financed from Pillar 1 of the EU budget (though with a smaller budget than the 30% proposed by the Commission), and applied uniformly across the EU. The level of compensation could be paid either per hectare or as a lump sum. The aim would be to encourage farmers to undertake at least 1 or 2 measures. Farmers should be able to apply for 'green growth' payments as part of their application for direct payments. This proposal is further discussed later under the 'menu' heading but an initial observation would be that the measures would not easily fit in the structure of Pillar 1 inspections as simple, generalisable measures.

Box 6. COPA-COGECA proposed 'green growth' measures

1. Incentives for resource efficiency with additional benefits for biodiversity Increased nutrient use efficiency (organic and mineral fertilisers) and efficiency improvements in the use of plant protection products e.g. through crop rotation, precision farming, leguminous crop planting, use of new plant varieties with better nitrogen use/more disease resistance, use of controlled-release nitrogen fertilisers, better manure/sludge management, more use of agricultural by-products… Many of these measures will also be beneficial for biodiversity. Increased water use efficiency through e.g. efficient irrigation (collective management, drip/sprinkler irrigation, monitoring of water need, use of cleaned waste water); retention of rainwater on fields/in ponds; efficient use of water for submerged crops (rice); controlled drainage…

2. Incentives for reduced GHG emissions (carbon dioxide, methane and nitrous oxide) with additional benefits for animal welfare e.g. green cover crops; under-sown catch crops; low protein livestock feeding and/ or use of feed additives; on- and/or off-farm biogas production using agricultural residues/manure…. In addition to reduced emissions, a changed diet for animals and the use of manure for biogas could bring benefits to animal welfare.

3. Incentives for carbon sequestration in agricultural soil and biomass with additional benefits for biodiversity e.g. improved soil & grassland management practices including no tillage/reduced tillage; retention of grassland and grass cover; agri-forestry and orchards/ vineyards/olive trees; perennial energy crops; buffer strips… These measures also bring benefits for biodiversity.

Source: COPA-COGECA, 2011

8.3. Flexibility – the menu approach

One of the main objections to the Commission's green proposals in Pillar 1 is the difficulty of finding one-size-fits-all measures for delivering environmental benefits in all EU-27 countries. 27 Member States have very different geology, geography, climate and other natural conditions, and taking a one-size-fits-all approach results in sub-optimal solutions. Ideally, measures need to be tailored and targeted to ensure the efficient delivery of environmental outcomes that address specific local needs. One way forward is to adopt a menu approach, which comes in two variants. Either choices can be defined at EU level from which MS choose, or at MS (or regional) level from which farmers choose. MS might be allowed to choose from a menu of measures to put together a package of conditions with which all farmers in that MS are expected to comply, but which may differ from the

package of measures in another MS (for example, one would expect different measures to feature in countries of Northern and Southern Europe). Or farmers are offered a menu of measures from which they are allowed to select in order to qualify for the green payment. This latter is the approach favoured by COPA-COGECA and described in the previous paragraphs.

A small precursor of the menu approach already exists in Article 68(a) of Council Regulation (EC) No 73/2009. This allows MS to use part of their direct payment national ceilings to provide specific support to their farmers under a number of conditions, including for 'specific types of farming which are important for the protection and enhancement of the environment' (coupled support) and for 'specific agricultural activities entailing additional agri-environment benefits'. In the latter case, the support can only cover the additional costs actually incurred and income foregone in order to fulfil the objective concerned. Article 68(b) allows in addition specific support to farmers 'in areas subject to restructuring and/or development programmes in order to ensure against land being abandoned.' From a slow start, some MS have started to use Article 68 for environmental objectives, including schemes for supporting permanent grassland under low-intensity use (e.g. in Denmark), and for local HNV farming support schemes (in the Burren, Ireland).

Ensuring equivalence in effort. Allowing MS the flexibility to choose from a wider menu of more locally-tailored options has many attractions, but there are also some potential drawbacks. The major objection is that it would lead to farmers in different countries being treated differently, with implications for the level playing field within the single market.[20] Some MS might be tempted to design their national measures in a way that made minimal demands on their farmers; other MS might have a much higher level of ambition for the delivery of environmental public goods and might seek to 'gold-plate' their national measures. Farmers in the high-ambition countries will feel aggrieved that their government is putting them at a competitive disadvantage. Environmental groups will worry that flexibility would allow low-ambition countries to get away with minimal effort.

It should be recognised that allowing for different levels of ambition is justified where the environmental public goods are local. The menu approach then allows for differences in national preferences over the environment and competing land uses to be expressed (although why local public goods should be financed from the EU budget in the first place under the subsidiarity principle would need to be explained). To the extent that the environmental public goods being pursued through EU regulation are EU-wide public goods (for example, because they derive from international obligations collectively undertaken by the EU, or because they are genuinely transboundary), then requiring a minimum level of effort is appropriate. If national governments wish to pursue more ambitious goals (because environmental public goods are more valuable to their citizens), there is no reason to forbid this through legislation. This is then a matter for decision in the national legislature which provides the appropriate checks and balances.

Giving flexibility to Member States. What is envisaged here is that the Commission would set a common framework at the European level in order to ensure that the level of requirements of MS schemes is sufficient and consistent across Europe. This is the option proposed by the European Parliament in its resolution of 23 June 2011 on *The CAP towards*

[20] The same issue currently arises with GAEC standards. COPA-COGECA highlights the situation as follows: "The measures under GAEC, in particular the optional ones, vary considerably between Member States. In some countries farmers are obliged to meet a measure under GAEC for no compensation for the additional costs; in other countries farmers can fulfil the same measure on a voluntary basis with compensation (as agrienvironmental measures under pillar 2) and in other countries farmers have neither the obligation nor any support if they adopt such a measure" (COPA-COGECA, 2011).

2020. On that basis, MS would have the possibility to implement specific schemes compatible with this framework. These schemes would have to be submitted for the Commission's approval. The Commission's proposals would be the default. But MS could propose alternatives. Countries could decide to do more! The experience with GAEC standards suggests that, once discretion is given to Member States, it can be difficult to insist on equivalence of standards (see discussion on GAEC standards below), particularly in the absence of agreement on a common set of impact indicators by which MS can be held to account. Recent developments in measurement tools (e.g. the national ecosystem assessment tool developed in the UK) may help to tell whether a measure in one country is producing an equivalent amount of natural capital to a different measure taken in another one. A radical variant of this approach would allow Member States to modulate the entire 30% allocation to the green payment to use in funding AEM schemes in Pillar 2, on the grounds that such expenditure will produce environmental benefits at least as great as what might be obtained using Pillar 1 measures (discussed further in the following Section).

Giving flexibility to farmers. This approach has been suggested by COPA-COGECA and also by the Groupe de Bruges, but in different variants. In the COPA-COGECA approach, farmers would be eligible for the green payment on a voluntary basis provided they agreed to adopt at least one or two measures from the menu. The Groupe de Bruges (2011) version would work on the basis of the system in operation in the UK since 2005, splitting greening payments up into several domains (water management, soil management, energy management, biodiversity management, etc.). For each domain farmers can achieve a maximum of 100 points by taking into consideration that a certain minimum level for each domain should also be reached. This baseline can gradually be set higher, giving farmers the opportunity to adjust their farming practices to be able to meet the new baselines. Furthermore, farmers can go beyond the baseline requirements for specific domains, thereby receiving a premium payment in line with the increase in performance points.

The advantage of providing greater flexibility to farmers is that it offers a way to incentivise farmers to provide agri-environment public goods rather than prohibiting them from certain actions or directing them to undertake them. However, it is clear that the monitoring and inspection requirements would go far beyond what MS undertake for Pillar 1 payments today, and leaves open the question whether such highly-flexible schemes are not better delivered through Pillar 2 as discussed in Section 9.

8.4. 'Green by definition'

The Commission Regulation would allow organic farmers to automatically qualify for the green payment on the grounds that these farmers contribute at least as much in terms of environmental public goods as would be provided by compliance with the three green measures.

> "In addition, although organic farming would not qualify as a measure because the relevant commitments are multi-annual, complex, undertaken on a voluntary basis and subject to detailed controls, it may be envisaged that farms (or part thereof) with organic farming certification (around 7.6 million ha, of which half is permanent grassland) receive automatically the greening component since the environmental benefits (and in most cases climate action) from organic farming are at least as high as from the greening measures combined. This should not nonetheless result in reduced support to organic farming under rural development policy, notably agri-environment measures." (European Commission, 2011b).

This exemption has led a number of stakeholders to argue that automatic qualification ('greening by definition') should be extended to other groups of farmers demonstrably following sustainable farming practices. The argument is that this would ensure consistency between greening in Pillar 1 and other environmentally targeted schemes; it would simplify the green payment by taking advantage of already existing schemes and controls; it would provide an incentive for farmers to get involved in these higher-level environmental schemes; and it would enhance the flexibility available to MS.

Broadly, two categories of farmers might be envisaged as qualifying for exemption under this 'green by definition' route. One is farmers who are already enrolled in an AEM under Pillar 2.[21] The other is farmers who comply with the growing number of environmental certification schemes (e.g. annual energy audit, carbon footprint, water efficiency, integrated farm management).

Providing the green payment automatically to farmers who are enrolled in a Pillar 2 AEM appears hard to justify given the legal requirements governing CAP payments which prevent paying for the same actions in both Pillar 1 and Pillar 2.[22] In terms of value for money for the taxpayer, it does not make sense to pay for the same thing twice.

There is a further issue that the two types of payments are reported differently to the WTO (see Section 7.6). Agri-environment payments are justified on the basis of additional costs and income foregone, whereas decoupled income support must meet the specific requirements in Annex 2 of the Agreement on Agriculture, specifically that the payments must be unrelated to the type or volume of production and are not limited to compensation for income foregone. There is a danger that linking the two payments might compromise the WTO green box status of these payments.[23]

By definition, 'green by definition' exemptions would not provide taxpayers with any additionality in terms of agri-environmental public goods – farmers are currently providing these services either voluntarily or in return for payment in an AEM. It therefore does not seem to be an appropriate route to follow in designing green payments. The proposed exemption for organic farmers should be amended to keep a clear distinction between what is paid for in Pillar 1 and what is supported in Pillar 2.

8.5. Using cross compliance (GAEC) as an alternative

The proposal. The concept of Good Agricultural and Environmental Condition (GAEC) was introduced in the 2003 CAP reform within the framework of cross compliance and has been implemented by the Member States since 2005. MS must now set farming standards in relation to EU regulations and directives (Statutory Management Requirements or SMR) and define GAEC standards. In implementing GAEC, Member States play a decisive role as

[21] Dacian Cioloș appeared to be receptive to this argument when he addressed the NFU Conference 2012 Birmingham, 21 February 2012. ""I know many farmers in UK are already meeting some of these requirements. Others are doing even more under the agri-environmental measures in the rural development programme or under national environmental schemes. We do not want you to do less and we are not going to disregard your efforts! We will find the appropriate ways to recognise efforts made under your agro-environmental schemes where they genuinely contribute to greening, while not removing the incentives to do more or better in the second pillar."

[22] This point is the subject of a written question to the European Commission from Mr George Lyon, MEP on 9 Feb 2012, E-001237/2012.

[23] This point was raised by Mr George Lyon, MEP in a question for written answer to the Commission on 9 February 2012, E-001236/2012.

the European legislative framework leaves flexibility to them to define the precise content of a GAEC minimum requirement taking into account local conditions.

> "Member States shall ensure that all agricultural land, especially land which is no longer used for production purposes, is maintained in good agricultural and environmental condition. Member States shall define, at national or regional level, minimum requirements for good agricultural and environmental condition on the basis of the framework set up in Annex IV, taking into account the specific characteristics of the areas concerned, including soil and climatic condition, existing farming systems, land use, crop rotation, farming practices, and farm structures. […]" (Article 6(1) of Reg. 73/2009).[24]

In this approach, additional green elements would be introduced into Pillar 1 payments by expanding the current list of GAEC requirements with a view to increasing the baseline for agri-environmentally beneficial practices while retaining the concept of a single payment scheme. A notional percentage of the payment could be ascribed to greening without splitting the single payment into two separate envelopes and without the need for two separate payment and control regimes. The proposal would allow measures to be targeted to relevant needs at national and/or regional level. It would involve establishing a menu of measures that would be mandatory in application but only where relevant and appropriate. This is in line with the current approach to GAEC which confines the application of GAEC standards to relevant territories and circumstances.

An interesting feature about this approach is that it would ask farmers to accept higher standards while receiving the existing level of direct payments. This might be seen as rebalancing property rights in the environment as represented by the baseline in favour of society rather than landowners. More likely, it is built on the assumption, discussed in Section 2, that in the absence of further greening it is unlikely that the Pillar 1 budget currently proposed would be maintained. It is the additional secured allocation of Pillar 1 funds (which, by its nature, cannot be assessed *ex ante* with any certainty) which represents the pay-off to farmers for accepting these higher GAEC standards.

Including green measures as part of cross compliance is the approach adopted in Switzerland, as discussed in Section 2.4 and elaborated in Box 7. Evidence was presented earlier that the Swiss approach shows that biodiversity can be enhanced at a continental scale under cross compliance.

[24] In the proposed horizontal regulation, this requirement becomes: "Member States shall ensure that all agricultural area, including land which is no longer used for production purposes, is maintained in good agricultural and environmental condition. Member States shall define, at national or regional level, minimum standards for beneficiaries for good agricultural and environmental condition of land on the basis of Annex II, taking into account the specific characteristics of the areas concerned, including soil and climatic condition, existing farming systems, land use, crop rotation, farming practices, and farm structures. Member States shall not define minimum requirements which are not established in Annex II" (European Commission, 2011c, Article 94).

Box 7. Cross-compliance rules for Swiss farmers

To qualify for direct payments, Swiss farmers must comply with the following six sets of standards for environmental performance.

Animal-friendly keeping of livestock. These rules require farmers to prove their compliance with the provisions of the regulation on animal protection. The farmers must demonstrate that they abide by the relevant legislation.

Balanced use of nutrients. The nutrient balance rules prescribe that the amount of nitrogen and phosphorus used must be calculated according to the needs of the plants grown and the potential level of production. The use of fertilisers has to be balanced, but surplus inputs of up to 10% are tolerated. Soil analyses have to be carried out at least every ten years for each plot of land in order to determine the nutrient reserves in the soil and adjust the applications of fertiliser needed to maintain soil fertility. Plots using no added fertiliser, such as extensive grassland meadows, are excluded.

Adequate share of ecological compensation areas. This rule requires that all farmers have 7% of the remaining utilised agricultural area laid out as ecological compensation areas and at least 3.5% covered by special crops (*i.e.* berries, fruit trees, outdoor vegetables, wine, *etc.*). Farmers can choose between 15 different habitat types (*e.g.* extensive meadows and pastures, and crop strips free of fertilisers and pesticides). The rules prescribe that strips of land of at least 0.5 metre in width must be left along paths and at least 3 metre-wide along rivers, hedges and forest uncultivated.

Regular crop rotation. In order to avoid monoculture, and to maintain the fertility of the soil and good quality of plants, an annual crop rotation plan must be devised which includes at least four different crops. There are rules for the maximum proportion of the main crops (*e.g.* 66% cereals, 40% maize and 25% potatoes). On farms with more than 3 hectares of open land, the main crops must occupy the majority of land under rotation; pauses between crops may also be stipulated.

Appropriate soil protection. This rule defines soil protection indices for each crop. In order to reduce soil erosion and the loss of nutrients or reduction of plant health products, farms with more than 3 hectares of open land are required to achieve a certain average level of plant cover for a specified number of days per year.

Targeted selection of pesticides. This requirement prescribes that equipment for plant protection has to be tested at least every four years and that plants should be treated according to the threshold of tolerance. In addition, certain types of applications are prohibited.

Source: OECD, 2010.

The option was reviewed by the Commission in its impact assessment (European Commission 2011b):

> "To make the greening effective, the measures in the greening component should be compulsory for the farmer, the discretion left to the Member State limited, and sanctions effective. If greening is effectively a requirement in the direct payments system, then wouldn't it be simpler to work instead on enhancing cross compliance?"

It responded to this question as follows:

> "Although this line of reasoning is put forth arguably on simplification grounds, it hides the complexities inherent in Member States defining and administering GAEC tailored to regional specificities. As the experience with the optional GAEC on crop rotation has shown, this approach would not necessarily ensure that the entire EU territory is effectively greened. At the same time, it would meet with considerable resistance from farmers as it would be framed as a requirement rather than an incentive, and arguably do away with the political visibility of greening direct payments that is one of the main drivers of this reform."

The issues identified by the Commission include the variation across MS in terms of GAEC definitions, farmer perception of greening as an imposition, and the loss of the political visibility of green payments.

The variation across MS is an issue which will arise with any move to provide greater flexibility and is not specific to GAEC – it would also be present in the menu approach or allowing 'green by definition' exemptions. Once MS are given discretion in the way an instrument is implemented, then in the absence of objective monitoring criteria by which they can be held to account, the role of Commission oversight is inevitably limited. Given the difficulties in measuring environmental outcomes and attributing causal effects, oversight by the use of objective monitoring indicators does not appear feasible at this time. The price for giving greater flexibility to MS will be regular battles over whether individual MS are doing enough.

The other Commission objections appear less compelling. Arguably, if it intends to make participation in the greening measures mandatory for those farmers receiving the basic payment, then the green measures are a form of super cross compliance already. So why complicate the payment system by introducing a separate payment with its own monitoring and control requirements? It would still be possible to ascribe a notional component of the single payment to the greening element if a political label were required. Without a clear link to the costs of providing these services it is hard to know how persuasive this labelling would be (nor indeed without visible results in terms of the environment), but surely the same objection applies to the 30% allocation in the Commission proposal?

Pursuing the GAEC option is a viable approach to offer flexibility to MS while minimising administration costs and remaining with the constraints of greening the CAP through relatively undifferentiated, broad brush measures undertaken by all farmers.

9. GREENING THROUGH PILLAR 2

KEY FINDINGS

- The viability of any option to purse greening through Pillar 2 depends on an increased budget allocation for this Pillar or greater prioritisation for AEM within the Pillar.
- A larger Pillar 2 budget would permit a larger number of farmers to enrol in Pillar 2 AEM but would still be unlikely to cover the whole territory
- Linking a larger Pillar 2 budget with higher GAEC standards is an attractive option to build on the advantages of a targeted approach while raising minimum standards across the entire land area.
- The proposal that farmers should enter a basic AEM scheme in Pillar 2 in order to be eligible for a payment in Pillar 1 (referred to as 'conditional greening') does not warrant further examination at this point in time.
- More ambitious Pillar 2 schemes will need more funding. The most desirable option would be to secure a larger relative Pillar 2 budget in the negotiations on the Multi-annual Financial Framework. If this is unsuccessful, Agricultural Ministers could shift resources from Pillar 1 to Pillar 2 through modulation. Even within Pillar 2, it would be possible to shift expenditure towards AEM by raising the mandatory minimum percentage to be spent on such measures.

9.1. The proposals

Three options to promote greening through Pillar 2 are outlined in this Section: 1) increased funding for voluntary AEM possibly linked to a redesign of AEM contracts to specifically attract those farmers currently less likely to participate; 2) accept that the voluntary nature of AEM schemes will result in patchy uptake but combine these higher-level schemes with enhanced GAEC standards; 3) link eligibility for payments in Pillar 1 to enrolment in a basic AEM in Pillar 2 (conditional greening approach). The viability of any of these options depends on an increased budget allocation for Pillar 2 or greater prioritisation for AEM within Pillar 2.

9.2. Extend current Pillar 2 approach

Agri-environment measures (AEM) have been a part of the CAP since 1992 (and even before then as a voluntary measure for MS) and are a thoroughly familiar part of the agricultural policy landscape. The different types of schemes in MS have been extensively evaluated, and there is now a good body of knowledge about what works and what does not. One option (advocated in the Parliament's 2010 Lyons report) to pursue the greening of the CAP is to build on this experience by strengthening Pillar 2 schemes through increased funding and increasing their attractiveness to farmers.[25]

[25] This view has received support from COMAGRI, for example, in its response to the Environment Committee's report on biodiversity. "Takes the view that rural development measures must continue to respond to the

A major drawback of AEM is that their voluntary nature means that their effectiveness is dependent on farmer participation. Ensuring that the right voluntary management options are attractive enough to be taken up at a sufficient scale is critical to scheme success. Figure 3 shows that there are marked differences in participation rates across MS. Related to the limited participation is also the selective nature of the participation. Enrolment also fluctuates in response to the rhythms of programming and budget cycles. Schemes tend to be more attractive to farmers who are already farming in a less-intensive way, and it has been difficult to attract more intensive farmers and farmers in more intensively-farmed regions to participate. Also, targeting agri-environmental policy mechanisms is a complex and resource intensive exercise both for the administrative body delivering the scheme and the farmers carrying out the management. Complexity, transaction costs, and administrative capacity are therefore important elements to consider in AEM design. The benefits of successful targeting are in improved achievement of environmental impacts, both in scale and intensity, greater efficiency as well as effectiveness (Keenleyside et al., 2011).

These limitations influenced the response of the Commission in the impact assessment to the following question that it posed (European Commission, 2011b):

> "Seen from the perspective of providing choice for the farmers, it would seem preferable to envisage measures with payment levels differentiated by measures according to cost incurred and income forgone, as well as to give more discretion to Member States for their design so as to tailor them as much as possible to specific situations. Wouldn't it thus be simpler to use part of Pillar I funding for complying with environmental measures within rural development policy instead?
>
> The problem with this approach is that it would give too much discretion to Member States and farmers, and, even in a best case scenario, would not link the greening requirements to Pillar I payments and would not cover the entire EU territory; this is clearly seen when one compares existing premia under agri-environment today with the future payment levels for the greening component as well as considers the varied uptake of agri-environment across Member States. This would be particularly detrimental for climate change objectives as it leaves the possibility for only a part of the farm to adopt climate friendly practices while the rest of the farm continues to be operated with potentially detrimental methods undermining the global result."

Some of these issues might be addressed by an appropriate redesign of AEM schemes. We can recall here the criticisms made by the Court of Auditors (2011) in its review of agri-environment schemes and its recommendations for the coming programming period (see Section 2.1). Flat-rate payment schemes will always encourage self-selection by farmers with the lowest costs of compliance, which may not be the farms facing the greatest environmental challenges or indeed the farms with the lowest cost of supplying environmental goods. Some countries have experimented instead with auction schemes, where farmers are invited to bid to supply these public goods. While such schemes have higher transactions costs than flat-rate schemes, they are more cost-effective in providing the supply, in part because they provide farmers with an incentive to seek out new methods of reducing costs or to introduce new ideas for the provision of environmental

challenges of climate change, the preservation of biodiversity, food security and the sustainable management of natural resources, and to foster balanced territorial cohesion and employment; calls, therefore, for a strengthening of Pillar II and for significant improvements to the environmental focus of that pillar and the effectiveness of its agri-environmental measures, including through minimum mandatory agricultural fund spending on agri-environmental measures (COMAGRI, 2012).

public goods (Latacz-Lohmann and Schilizzi, 2005). It is also possible to target them on particular types of farms such as more intensive farms or farms in more intensively-farmed regions. Unfortunately, the structure of AEMs in Pillar 2 at present involves monitoring and control via input indicators rather than impact indicators, and thus there is no incentive for MS to seek the most efficient ways of providing agri-environmental public goods.

It is important to clarify that those who argue that it is inadequate to rely on Pillar 2 schemes *alone* to ensure the appropriate supply of agri-environmental public goods may see an important role for a strengthened Pillar 2 in the overall CAP architecture as a *complementary* measure to any instruments that might be introduced or expanded in Pillar 1.

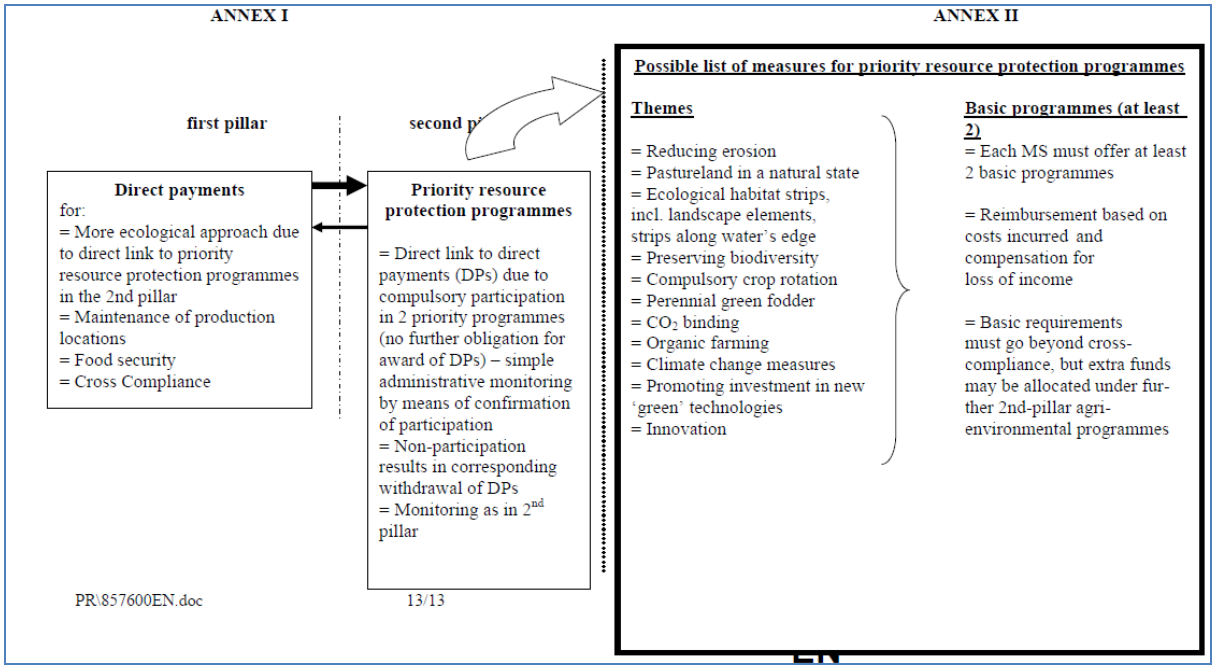
9.3. Link with higher GAEC standards

Another approach to tackling the lack of universality associated with Pillar 2 AEM is to combine a strengthened Pillar 2 approach with enhanced GAEC standards. The higher GAEC standards would ensure some minimal improvement in environmental indicators across the EU as a whole. Higher GAEC standards also raise the baseline for AEM, and in principle release funding for additional measures (under the principle that double payment should be avoided, measures currently funded under an AEM but now included in GAEC would no longer be eligible for support under Pillar 2). This option raises no new issues, as both the strengthening of Pillar 2 and raising GAEC standards are discussed elsewhere. However, it seems useful to maintain it as a separate option when thinking about the most appropriate ways forward in greening the CAP.

9.4. Conditional greening approach

The basic idea behind this approach is that farmers would be required to enter a base-level agri-environment scheme in Pillar 2 in order to remain eligible for Pillar 1 payments. The idea was included in the initial draft report of the rapporteur Mr Albert Deβ to COMAGRI on the Commission's Communication on *The CAP towards 2020* but removed in the Committee's final report (see Section 3.2). The idea was spelled out in more detail in an annex to the initial draft report, which is reproduced as Figure 7. The key point is that the greening of the Pillar 1 payments would be achieved by compulsory participation in a minimum of two priority resource protection programmes in the second Pillar. Member States would be required to offer a minimum of at least two basic programmes, which might combine a number of measures. In this approach, farmers would be reimbursed for the costs they incur as well as receive compensation for any loss of income. The Deβ initial draft report recommended that these basic programme measures would be fully funded by the EU CAP budget with no co-financing requirement from the Member States.

Figure 7: Possible outlines of an approach to ecologically sounder farming



Source: European Parliament, 2011

The Deβ initial draft report leaves the source of funding for this conditional greening scheme unclear. On the one hand, the scheme is proposed as a condition for eligibility for a Pillar 1 payment. Although not explicitly stated, the presumption is that the payment being considered here is the greening payment and not the basic payment as proposed by the Commission. On the other hand, the proposal explicitly states that farmers would be reimbursed for the costs they incur as well as receive compensation for any loss of income, which is the criterion used for AEM in Pillar 2.

It is hard to imagine that farmers would be asked to sign up to AEM measures administered through Pillar 2 without compensation, but be somehow reimbursed through a generalised payment in Pillar 1. It would be far simpler either to include these basic AEM measures in the GAEC standards (if they were few and relatively undifferentiated) or in the menu approach (if larger in number and more diverse) which would give the same result. Indeed, the menu approach was endorsed by the Parliament in its resolution on the CAP in June 2011.

Another interpretation is that farmers' participation in the basic AES schemes would be funded through Pillar 2. But then it is hard to see what incentive there is for farmers to sign up for these schemes, if there is no longer a green payment in Pillar 1 (either because the 30% allocated to the green payment is transferred to Pillar 2 to pay for the very significant expansion in the number of farmers enrolling in basic AEM schemes, and/or because it is not possible to justify paying twice in two Pillars for the same management practices).

Thus, the conditional greening approach is only relevant if it is intended to link mandatory compliance to the basic payment. While this idea is worth considering on its own merits, it is not pursued here because it is not currently on the greening agenda before the Parliament.

9.5. Ensuring the budget for Pillar 2 schemes

All options to pursue greening through Pillar 2 assume that additional funding is provided for this pillar. This funding can come: (1) through shifting funds from Pillar 1 to Pillar 2 in the negotiations on the 2014-2020 Multi-Annual Financial Framework; (2) by modulating funds from Pillar 1 to Pillar 2 either on a voluntary or mandatory basis; (3) by requiring a higher share of a fixed Pillar 2 budget to be devoted to AEM schemes.

Negotiating a higher Pillar 1 share in the MFF. This is by far the cleanest solution but there seems to be little enthusiasm to move further along this road at the present time. Opposition from Pillar 1 beneficiaries and from Member States who must co-finance Pillar 2 payments appears to be the main reasons for this reluctance. The Commission's MFF proposals signal a (temporary?) halt to the steady growth in the importance of Pillar 2 since it was created in the first Fischler CAP reform in 1999.

Possible use of modulation to transfer funds to Pillar 2. If there were no agreement in the MFF negotiations to increase the Pillar 2 budget, Agricultural Ministers could still effect a transfer by including modulation provisions in the relevant regulations. Modulation could be compulsory or voluntary. The draft regulation would allow Member States to transfer up to 10% of their Pillar 1 ceilings to their Rural Development budgets on a voluntary basis.

One possible option would be to give Member States the option of using the 30% allocation in Pillar 1 or transferring the money for use in AEM in Pillar 2. To make this attractive, there would have to be no co-financing requirement for modulated funds.[26] This could be seen as adding to the flexibility options of MS discussed in Section 8.

Giving greater priority to AEM schemes within Pillar 2. During the 2007-2013 programming period, MS are required to devote at least 25% of their EAFRD funding to AEM schemes. Apparently after some initial hesitation, the Commission has included in the preamble to the draft Rural Development Regulation the following statement:

> "Member States should maintain the level of efforts made during the 2007-2013 programming period and have to spend a minimum of 25% of the total contribution from the EAFRD to each rural development programme for climate change mitigation and adaptation and land management, through the agri-environment- climate, organic farming and payments to areas facing natural or other specific constraints measures."

If additional funding for AEM schemes were required, it would be possible to raise this percentage and to strengthen this commitment by including it in the text of the regulation itself. This is a political decision on which no advice can be given.

[26] A precedent for eliminating the co-financing requirement for Pillar 2 funds exists in the use of funds gained by capping.

10. CONCLUSIONS

[The Commission proposals have] clear advantages of commonality, avoiding un-level playing field and simplicity. But, does environmental management lend itself to these principles? It is place-based, long-term, specific to farming systems, therefore lends itself to regionally defined, targeted approach.

Allan Buckwell, 2011

10.1. Summary

The appropriate design of measures to enhance the supply of agri-environmental public goods has to balance a number of conflicting objectives. These were highlighted in the initial reactions to the Commission's proposal in Section 3.

- The need for measures to have a universal application across the whole land area of the EU. This criterion does not imply that these must be necessarily the *same* measures. Nor does it rule out that there may be some acceptance of the principle of different comparative advantages of different types of land in providing food, environmental goods or other goods and services. But there is a widespread acceptance that the patchy uptake of existing voluntary AEM schemes in Pillar 2, and the self-selection of farmers into those schemes, does not match the scale and ambition of farmer participation necessary to master the challenges faced by the natural environment. Thus any proposal to green the CAP must address the issue of greatly expanding the area of land covered by appropriate land management to match the scale of these challenges.
- The need for measures to clearly deliver additional environmental benefits over and above the current situation. The Commission's proposed budget for green payments over the 2014-2020 period amounts to almost 90 billion euro. This would be a very significant increase compared to expenditure on AEM schemes in Pillar 2 in the 2007-2013 period, estimated at 22.2 billion euro (ECA, 2011). Given the current fiscal crisis facing Member States, it should be unthinkable to divert such a significant sum to measures which yield little or nothing to the EU taxpayer.
- The need for measures which can be relatively easily managed and implemented by Member State administrations and understood by farmers. Adding further environmental objectives to agricultural policy will complicate the policy and increase administrative costs. However, these increases can be minimised by avoiding the creation of new payment structures or multiplying eligibility criteria, and by providing flexibility to Member States. Similarly, gaining the support of farmers and land managers is crucial to the success of environmental efforts. Prescriptive policies which appear to tell farmers what to do, which do not give them the opportunity to exercise their skills and local knowledge and which appear not to make sense on the ground will simply build a climate of non-cooperation and resentment. Opportunities to allow farmers to exercise good environmental stewardship to meet clearly-articulated and well-founded objectives are much more likely to bring forward the desired management and land use changes.
- The need for measures which are cost-effective and which achieve the provision of additional agri-environmental public goods at minimum cost. This criterion is related to the second one, namely that there should be additionality in environmental benefits as a result of the measures. Where there is limited additionality, and where farmers receive a payment for practices they were doing anyway, then there is a

large deadweight loss and cost-effectiveness will suffer. But even where substantial additional environmental benefits can be shown from a measure, it remains important to minimise the cost of obtaining these benefits. Section 2 discussed the potential conflict between the provision of agri-environmental public goods and increasing food production. While the argument was made there that the case for ignoring or downplaying the challenges faced by the natural environment is not a strong one, there is nevertheless, and rightly, a high sensitivity around this issue. This makes it even more important that environmental public goods are provided as efficiently and at as least cost to food production as possible.

- Finally, the need for measures which are perceived as fair and equitable by stakeholders, primarily Member States in this context. Defining equity is not easy. Countries are diverse in terms of the extent of their environmental problems and in their ability to respond to these challenges, and in the values they place on additional environmental public goods. Equity is defined in the first instance in terms of bringing all Member States to similar environmental standards. But given that the natural environment has many dimensions, how to make these commensurable? How to recognise that some countries and their farmers have made bigger efforts in the past so that these efforts are not undermined or undervalued? How to find an appropriate criterion to allocate the green payment intended to compensate or incentivise ther farmers to tackle these environmental challenges across Member States? How to decide if one Member State's flexibility is, in the eyes of another Member State, just a way of limiting the impact of the measure on its farmers? Adjudicating on these issues is never easy, but agreement can be facilitated by clarifying and agreeing the objectives the measures are designed to achieve.

Table 2: Summary of impacts of different instruments to promote environmental public goods

	Greening	Cross-compliance	AEM
Universality	++(+)	+++	+
Environmental effectiveness (additionality/deadweight)	+	+	++
Administrative costs/ Simplification	++	+++	+
Cost effectiveness	+	++	++
Fairness/equity	+	++	+++

Source: Own compilation

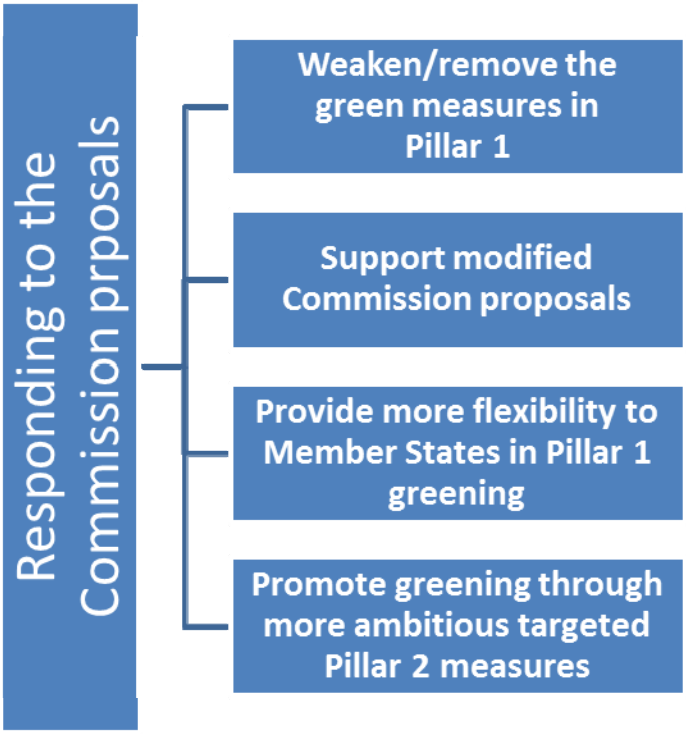
It is possible to try to rank the different approaches to greening discussed in this note according to these criteria. Any one person's ranking, including that of this author, is inevitably subjective, but the exercise itself is a valuable one. The ranking suggested by this author is set out in Table 2, where the greater the number of stars, the better the option scores on that particular criterion. What emerges from the table, in my view, is that no one approach dominates all others on all criteria. Thus, the selection of the appropriate approach to further green the CAP inevitably involves compromises. What is also clear is that, again in my view, AEM measures in Pillar 2 generally outperform or tie with the alternative approaches. Their main weaknesses are their lack of universality and potentially their administrative complexity and high transactions costs. This could be overcome partly through better contract design (greater use of auction contracts rather than flat-rate schemes to improve targeting) provided the budget is available. It could also be overcome either by requiring farmers receiving payments in Pillar 1 to enter a basic AEM in Pillar 2 (conditional greening) or by linking this approach with enhanced GAEC standards which

would apply to the great majority of farmers in receipt of direct payments. MEPs and other readers are invited to make their own entries for Table 2.

The purpose of this note is to assist MEPs in a practical way to identify the issues raised by the Commission's greening proposals as they formulate their responses. We have therefore chosen to present our findings in terms of a decision tree (Figure 8). The idea is that MEPs first choose which branch of the tree they wish to follow and, depending on that choice, following that branch identifies a series of possible amendments to the Commission's proposals designed to achieve the objectives of that branch. Of course, the various branches are not water-tight and, within limits, it would be possible to mix and match between them, so the decision tree is primarily a heuristic device.

The implications of the four choices are now presented. In some cases, a specific choice is indicated. In other cases, there is simply a placeholder indicating that an issue has raised some controversy but the way to address it may not be clear. In all cases, it would be highly desirable for the Parliament and its committees to ask for and listen to the advice of experienced conservationists and environmentalists to ensure that its recommendations are based on the most relevant scientific advice.

Figure 8: Decision tree in responding to Commission's greening proposals



Source: Own compilation

10.2. Weaken/remove the Commission's greening proposals

This branch of the tree is chosen by those who do not support the Commission's proposal to green Pillar 1 and who may not support any greening agenda in the CAP. These persons may believe that short-run food production capacity is more important at this point in time. They may feel that additional greening runs counter to the simplification agenda and is too complex or burdensome to administer regardless of the form that it takes. Or they may

seek to pursue a meaningful greening agenda but outside of Pillar 1 for reasons given at various places earlier in this note.

Aside from seeking to remove all references to greening in the Commission's proposals, the options available on this branch of the tree include:

- Reduce the greening element from 30% of the direct payments national ceiling.
- Make the green payment an opt-in payment so that it is effectively voluntary and ensure that sanctions for non-participation do not go beyond the loss of the green payment itself.
- Remove one or more of the greening measures:
    - Leave the permanent pasture restriction as it is under the current rules, at the member state level.
    - Remove the crop diversification requirement (only 2% of land area affected, poor return measured against the additional administration).
    - Lower or remove the EFA requirement from 7%.

10.3. Support modified Commission proposals

This branch builds on the Commission proposals but modifies them to maximise environmental benefits and address some unintended consequences. This branch of the tree would be chosen by those who are attracted by the universal potential of greening Pillar 1 as the Commission proposes (though this potential is only likely to be realised if eligibility for the basic payment is also made conditional on meeting whatever greening measures are agreed). It would also be favoured by those who believe it would be politically impossible to get agreement for a significant increase in the Pillar 2 budget to allow a more ambitious scaling up of AEM schemes. But compared to those opting for the third branch, these advocates are persuaded by the Commission's argument that only a very limited number of simple and generalizable measures ('one size fits all') can be easily universalised without adding greatly to the administrative complexity of the CAP and without raising complicated comparisons of fairness between the Member States. The 'one size fits all' approach avoids additionality, but it also avoids MS gold-plating their schemes. Farmers already farming in a sustainable way would not be asked to do anything extra. For example, a farm with relatively small field sizes surrounded by hedges would already be a long way towards fulfilling EFA requirements, whereas farms with boundary to boundary cultivation without landscape features would have more to do.

The options available on this branch of the tree include:

- EFAs
    - Clarify the definition of the base area
    - Clarify permitted land uses
    - Consider whether the 7% threshold should be revised up or down, or linked with the type of management undertaken
    - Stimulate realisation of green infrastructure by encouraging connectivity
    - Define management prescriptions
- Crop diversification
    - Clarify what counts as a crop in meeting the diversification criteria
    - Change the minimum area threshold above which the measure is required
    - Consider whether the upper maximum proportion for the main crop should be changed

  - Clarify the treatment of permanent crops
  - Address the potential for perverse unintended consequences on mixed livestock farms
- Permanent pasture
  - Review the definition of permanent pasture
  - Consider whether rotational flexibility should be allowed
  - Reflect on how to avoid perverse effects from setting the reference year baseline to 2014
  - Consider increasing the tolerance/franchise at farm level from 5%.
  - Consider introducing farm-level limits only if there is a risk that a country might fall below its national reference level
  - Put greater focus on protecting high-nature-value grassland.

10.4. Provide more flexibility to Member States in Pillar 1 greening

This branch of the tree explores alternative options for greening within a Pillar 1 framework. It would be chosen by those who are attracted by the universal potential of greening Pillar 1 as the Commission proposes (though this potential is only likely to be realised if eligibility for the basic payment is also made conditional on meeting whatever greening measures are agreed). It would also be favoured by those who believe it would be politically impossible to get agreement for a significant increase in the Pillar 2 budget to allow a more ambitious scaling up of AEM schemes. But compared to those opting for the second branch, these advocates are willing to trade some extra degree of administrative complexity and potential inequities between Member States for the potential to generate a higher level of environmental public goods through implementing more targeted and tailored schemes.

The options available on this branch of the tree include:

- Consider the introduction of further 'simple, generalisable' greening measures
  - Crop rotation
  - Strengthened focus on HNV grassland
  - Green growth and resource efficiency issues
- Consider allowing MS to define their own menu of measures
  - How much of this menu should be defined in the basic regulation, bearing in mind that what is defined in the regulation will set the baseline for Pillar 2 AEM schemes??
  - How can the powers of the Commission as arbiter of minimum standards be ensured?
- Consider extending the exemption given to organic farming
  - What other farm criteria might be deemed equivalent to determine eligibility for the green payment?
  - How might the charge of 'double payment' be avoided if enrolment in an AEM were deemed to confer automatic eligibility for the green payment?
  - Is there a gain for taxpayers in terms of more environment in allowing automatic exemption?
- Consider implementing the green measures by incorporating them in GAEC with its associated MS flexibilities. The Swiss have shown it is possible to incorporate quite sophisticated environmental conditionalities into cross-compliance rules.

10.5. Promote greening through more ambitious targeted Pillar 2 measures

This branch of the tree explores options to pursue greening through Pillar 2. It would be chosen by those who are willing to trade the universality of a Pillar 1 measure for more targeted and hopefully more effective measures delivered through Pillar 2. As noted in Section 9, there are essentially three options: 1) increase the budget for AEM schemes and redesign AEM contracts to specifically attract those farmers currently less likely to participate; 2) accept that the voluntary nature of AEM schemes will result in patchy uptake but combine these higher-level schemes with enhanced GAEC standards; 3) link eligibility for payments in Pillar 1 to enrolment in a basic AEM in Pillar 2 (conditional greening approach). A crucial requirement for someone to choose this branch is a belief that a mechanism to ensure an increased budget allocation to Pillar 2 can be found.

The options available on this branch of the tree cannot be as specific as for the other branches because they involve a more radical departure from the legislative proposal currently on the table. There are no draft articles in the regulation setting out the mechanics of how one of these options might work. Unfortunately, this also means that we are lacking a relevant impact assessment which would help to tease out some of the pitfalls of this approach. However, the conditional greening option is not considered further for the reasons given in Section 9.4.

The areas of work on this branch might include:

- If the negotiations on the next MFF fail to significantly increase the amount of resources devoted to Pillar 2, should the option of mandatory modulation of funds from Pillar 1 to Pillar 2 be examined?
- Should the allowance for voluntary modulation by MS of 10% of their Pillar 1 national ceilings to Pillar 2 be increased?
- Might Member States be given the option of transferring their 30% green payment budget to Pillar 2 for use in AEM schemes in return for relief from the greening measures in Pillar 1?
- Should a mandatory proportion of each MS national ceiling be allocated to measures addressing the environment and climate change, and should that be increased significantly above the 25% figure mentioned in the preamble to the Commission's rural development regulation?

10.6. Recommended strategy

The Commission proposal would allocate a budget of almost 13 billion euro annually to further green the CAP. One way to think about the optimal way forward is to ask: how could this budget best be spent to get the maximum agri-environmental benefits?

The underlying assumption of this note is that more needs to be done, on top of the measures already enacted, to encourage more environmentally-sustainable management of agricultural land.

The Commission strategy is to propose shallow, one-size-fits-all, greening measures in Pillar 1. This appears mainly designed to justify the continuation of the current level of CAP spending. Greening of Pillar 1 is proposed predicated on the assumption that there is no

political willingness in the Council of Ministers to shift resources from Pillar 1 to Pillar 2 and to use the additional resources to invest more heavily in Pillar 2 AEM schemes.

Under the Treaty of Lisbon, the spending side of the MFF is decided using the consent procedure. This means that the draft MFF is prepared unanimously by the Council and is then forwarded for adoption (or rejection) by a majority of the members of the Parliament. The Parliament does not have the power to propose amendments, and thus has limited ability to influence the detail of the spending decisions taken by the Council. This is without prejudice to the Treaty injunction that, throughout the procedure leading to the adoption of the financial framework, the European Parliament, the Council and the Commission shall take any measure necessary to facilitate its adoption. This does give the Parliament some opening to bring its influence to bear in the negotiations to prepare a common text on which the Parliament can agree.

The analysis in this note strongly supports the advantages of pursuing greening through Pillar 2. The major criticism of the Commission proposals is that requiring every farm in the Union to follow exactly the same measures is both inefficient and ineffective. The approach is prescriptive and rules-based and will not encourage the support and commitment of farmers to better environmental management. Member States have sought additional flexibility in implementing the Commission measures. But to be meaningful, such flexibility would have to operate at the farm level, where farmers would have a choice among a range of options to gain eligibility for the green payment. Such flexible menu schemes belong in Pillar 2 and not in Pillar 1, at least with the current regime for the administration, monitoring and inspection of Pillar 1 payments.

The Commission proposals also raise broader issues of fairness and proportionality among Member States. Not all Member States and regions face the same environmental pressures. Some Member States and regions will have a range of viable alternatives to engage in greening (e.g. in terms of crop diversification, there may be a range of competitive alternatives in some regions but very few in another). This means that the costs of greening will differ widely across Member States, as the Commission impact analysis shows. The data presented earlier in the note showing the wide differences in the land area enrolled in Pillar 2 AEM demonstrates that also the current intensity of agri-environment policy measures differs across Member States. Some MS would be introducing Pillar 1 greening measures in the context where many farmers are already enrolled in agri-environment schemes. While this has fuelled the demand for exempting these farmers from the additional compliance measures under the 'green by definition' label, as discussed earlier this is not a satisfactory outcome from the viewpoint of the taxpayer and raises potential problems of double payment and WTO compatibility. The introduction of green measures in Pillar 1 could even lead to reduced interest among farmers in Pillar 2 schemes because the baseline for entry to Pillar 2 schemes will now be higher. These are all reasons to include further greening measures in Pillar 2 rather than Pillar 1.

The main objection to relying on Pillar 2 AEM, apart from the presumed unwillingness of the Council to increase the Pillar 2 budget, is that participation in Pillar 2 AEM is selective. The evidence shows that the more intensive farms with a poorer environmental profile are less likely to participate. In part, this is a question of the design of Pillar 2 schemes. Flat-rate schemes will inevitably be most attractive to those farms which must make the minimal changes to their farming practice to comply. But it is possible to design AEM (through the use of auctions, for example) which specifically target problematic environmental issues and areas within a region.

An alternative approach where universal coverage is felt to be important is to include one or more specific greening measures in the cross-compliance conditions for the basic payment. Whether a basic income payment is needed or justified is debated (Swinbank, 2012), but while Pillar 1 continues to include a basic income payment the cross-compliance conditions could be enhanced to address environmental needs, for example, by including additional standards as part of good agricultural and environmental condition. One attraction of this approach is that flexibility is left to Member States how they wish to implement these standards. While some criticise this as leading to an uneven application of standards across the EU, it seems to me that this is an inevitable, and even desirable, outcome of allowing flexibility to Member States to address their environmental problems in the best way that they see fit.

Thus, the most desirable way forward would be to follow the branch of the decision tree which promotes more ambitious targeted and flexible Pillar 2 AEM schemes as recommended in the Parliament's July 2010 resolution on the future of the CAP after 2013. This would require a further shift of funds from Pillar 1 to Pillar 2, in line with the trajectory pursued since the Agenda 2000 reform. If the Council of Ministers decides not to alter the Commission MFF proposal in this respect, it would still be open to the Parliament to amend the direct payments regulation to provide for further modulation of the Pillar 1 national ceilings so that the green component of this budget could be transferred to Pillar 2. Greening Pillar 1 in the manner proposed by the Commission is very much a second-best option in terms of both environmental effectiveness and economic efficiency.

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ANNEXES

Annex 1: EU Framework of issues and standards for Good Agricultural and Environmental Condition

Issue	Compulsory standards	Optional standards
Soil erosion: Protect soil through appropriate measures	- Minimum soil cover	- Retain terraces
	- Minimum land management reflecting site-specific conditions	
Soil organic matter: Maintain soil organic matter levels through appropriate practices	- Arable stubble management	- Standards for crop rotations
Soil structure: Maintain soil structure through appropriate measures		- Appropriate machinery use
Minimum level of maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats	- Retention of landscape features, including, where appropriate, *hedges, ponds, ditches trees in line, in group or isolated and field margins*	- Minimum livestock stocking rates or/and appropriate regimes
		- *Establishment and/or retention of habitats*
	- Avoiding the encroachment of unwanted vegetation on agricultural land	- Prohibition of the grubbing up of olive trees
	- Protection of permanent pastures	- Maintenance of olive groves and vines in good vegetative condition
Protection and management of water: *Protect water against pollution and run-off, and manage the use of water*	*- Establishment of buffer strips along water courses (implemented by 2012)*	
	- Where use of water for irrigation is subject to authorisation, compliance with authorisation procedures	

Note: Standards shown in *italics* were added in 2009
Source: Annex III of Council Regulation (EC) No 73/2009)

Annex 2: Common indicators for Measure 214 Agri-environment payments 2007-13

Output indicators

Number of farm holdings and holdings of other land managers receiving support
Total area under agri-environmental support
Physical area under agri-environmental support under this measure
Total number of contracts
Number of actions related to genetic resources

Result indicators

Improving the environment and the countryside through land management

(6) Area under successful land management contributing to:
(a) bio diversity and high nature value farming/forestry
(b) water quality
(c) mitigating climate change
(d) soil quality
(e) avoidance of marginalisation and land abandonment

Impact indicators

Reversing biodiversity decline: change in trend in biodiversity decline as measured by farmland bird species population
Maintenance of high nature value farmland and forestry: Changes in high nature value farmland and forestry
Improvement in water quality: Changes in gross nutrient balance
Contribution to combating climate change: Increase in production of renewable energy.

Source: DG Agriculture and Rural Development, 2006

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