

# **Reform of the Common Agricultural Policy: Opportunities for Reorientation**

**Comment on Environmental Policy**

**January 2013**

**No. 11**

The Advisory Council on the Environment (SRU) was founded in 1971 to advise on German and European environmental policy. The Council is made up of seven professors from a range of different environment-related disciplines. This ensures an encompassing and independent evaluation from a natural scientific and technical as well as from an economic, legal, and political science perspective. The Council is a member of the network of European Environmental and Sustainable Development Advisory Councils (EEAC). It has currently the following members:

- Prof. Dr. Martin Faulstich (Chair),  
Clausthal University of Technology
- Prof. Dr. Karin Holm-Müller (Deputy Chair),  
Rheinische Friedrich-Wilhelms-Universität Bonn
- Prof. Dr. Harald Bradke,  
Fraunhofer Institute for Systems and Innovation Research ISI in Karlsruhe
- Prof. Dr. Christian Calliess, Freie Universität Berlin
- Prof. Dr. Heidi Foth, Martin Luther University in Halle-Wittenberg
- Prof. Dr. Manfred Niekisch, Goethe University Frankfurt,  
Frankfurt Zoo
- Prof. Dr. Miranda Schreurs, Freie Universität Berlin

German Advisory Council on the Environment

Luisenstrasse 46

10117 Berlin

Germany

Phone: +49-30 / 26 36 96-0

Website: [www.umweltrat.de](http://www.umweltrat.de)

E-mail: [info@umweltrat.de](mailto:info@umweltrat.de)

# Contents

- 1 Introduction ..... 3**
- 2 Public money for public goods only – the SRU’s 2009 proposal ..... 6**
- 3 Assessment of the European Commission reform proposals .....11**
- 4 Conclusions.....21**
- Bibliography .....23
- List of Abbreviations .....28



# 1 Introduction

1. The new seven-year funding period of the EU Common Agricultural Policy (CAP) begins in 2014. Also due to enter into force at the same time are a new regulation on direct payments to the agricultural sector and a new regulation on support for rural development (EAFRD Regulation).

2. The multiannual financial framework lays down the sources and use of the EU funds, and thus also determines how much money will be made available in the individual policy areas – i.e. including the CAP – in the relevant funding period. EU funding for agriculture is made up of two pillars. The first pillar comprises market-related expenditure such as export subsidies, storage and processing subsidies, and also direct payments. Direct payments are entitlements which are granted to the farm per hectare of eligible land and which are independent of production. Under the Direct Payments Regulation (Council Regulation No. 73/2009 of 19 January 2009), which remains in force until the end of 2013, the payments are subject to fulfilment of the cross-compliance requirements. The resulting environmental protection conditions are drawn from selected EU directives and also include the minimum requirements for maintaining land in good agricultural and environmental condition (GAEC). From the point of view of environmental protection and nature conservation, however, these are not sufficient to ensure ecological services by agriculture to the necessary extent. The current reform, however, intends to step up the environmental requirements for the award of direct payments; this process is referred to as “greening” (see Item 13 f.).

The second pillar of the CAP is concerned with rural development, which also includes support for voluntary, regionally adapted agri-environmental and climate measures. In the second pillar, the EU specifies the overarching goals for rural development and defines areas for funding. However, it leaves it to the member states to draw up specific funding measures, obtain EU approval for them and bundle them in programmes. Furthermore, the measures have to be co-financed at national level by the member states, whereas expenditure under the first pillar is financed in full by the EU budget.

3. In a communication issued in 2010, the European Commission stated that strengthening the provision of ecological goods (European Commission 2010, e.g. p. 6) and gearing direct payments to ecological criteria (op. cit, p. 9) were important challenges and goals of the reform. This reflects the special relevance of agriculture to nature and the environment. The CAP is potentially the most extensive funding instrument for ecosystem services on agricultural land. It is also the most effective instrument in terms of area, as roughly half of the land in the EU is used for agricultural purposes (European Commission – DG Agriculture and Rural Development 2012). Reorientation of EU agricultural policy therefore has far-reaching implications as the most important steering instrument in this sector.

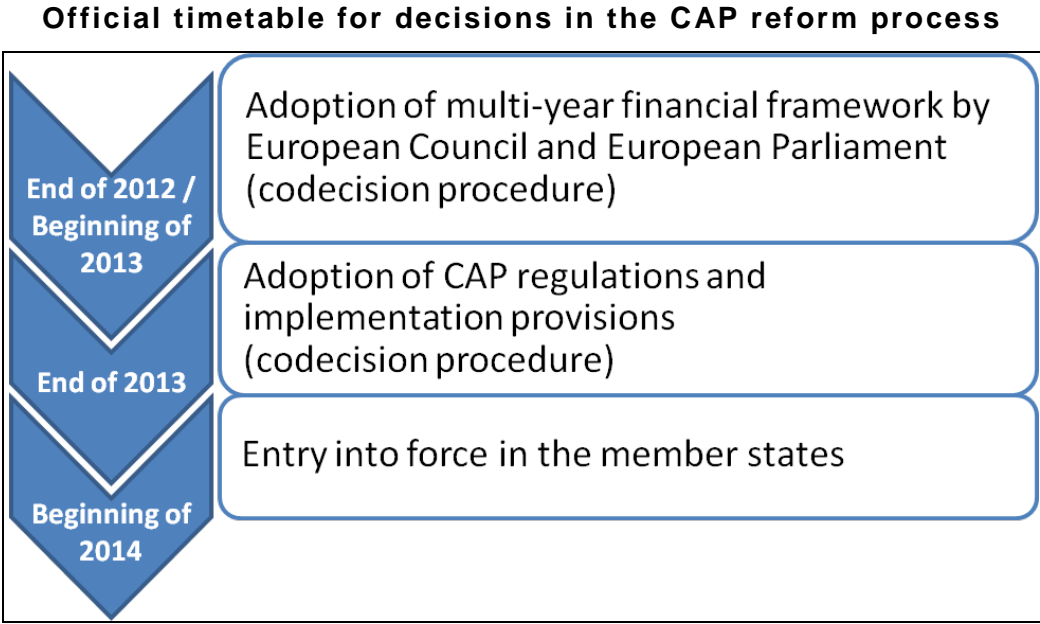
For this reason the German Advisory Council on the Environment (SRU), in its statement “Towards a Common Agricultural Policy that meets today’s challenges” published in November 2009, expressed its views on the reform from the point of view of environmental protection and nature conservation, and put forward recommendations for environmental reorientation.

4. In the meantime the reform has gained momentum. In October 2011 the European Commission presented its proposals – not only for the multiannual financial framework for the period 2014 to 2020 (revised Commission proposal of 6 July 2012, European Commission 2012c), but also for a new direct payments regulation (European Commission 2012a) and a regulation on rural development policy (European Commission 2012b) – as part of an overall reform package.

In particular, the proposal concerning the Direct Payments Regulation (referred to below as “Commission proposal”) has been the subject of intensive discussion for some time now. In view of the current debate, the SRU explicitly wishes to take this opportunity of pointing out that assistance for agriculture should be redesigned to provide rewards for public services. The SRU supports the Commission proposal as an important step in this direction and notes with concern that various actors are seeking to water down the environmental effectiveness of important elements of the reform proposals. In two inter-related fields of action there are signs of developments which could mean the failure of efforts to bring about an ecological reorientation of the CAP:

- The future budget of the EU is under great pressure, because various countries (e.g. United Kingdom, Denmark, Netherlands) are seeking to reduce their contributions. If – as can be expected – the funds for the CAP are reduced as well, there is a risk that this will also mean a reduction in the funds made available for nature conservation and environmental protection.
- A number of attempts are being made to water down the original environmental requirements, which the Commission proposes should to be tied to the entitlement to direct payments.

Figure 1:



Source: BMELV 2012; European Commission 2012d, p. 2; RIBBE et al. 2012, p. 7

5. The decision on the multiannual financial framework is a critical step in the CAP reform process. This will also determine the distribution of funds between the two pillars (European Commission 2012c). According to the proposal by the Cypriot Presidency, the multiannual financial framework will also lay down the level of the co-financing rates for the second pillar, and also determine whether and on what scale the direct payments are coupled to environmental requirements (see Item 13; Council of the European Union 2012b). The details of the greening of the first pillar and the orientation of the promotion of rural development will then be dealt with in the regulations which are to be adopted during 2013. Whether the reform can go ahead in line with the planned timetable depends on whether agreement can be reached on the multiannual financial framework at the beginning of 2013.

## **2 Public money for public goods only – the SRU’s 2009 proposal**

**6.** A CAP that meets today’s challenges has to ensure that negative effects of agriculture are curbed and rewards are given for providing services that are not paid for by the market, e.g. conservation of biodiversity and carbon storage (referred to below as “public goods”; SRU 2009, p. 7 and 13 ff.). In future, only an agricultural sector that provides public goods should be entitled payments from society. The SRU sees an urgent need for action and guidelines for the allocation of funds under the reformed CAP in the following areas:

- compliance with minimum environmental and nature conservation requirements even on intensively used high-yield sites,
- maintaining extensive agricultural production with its positive effects on biodiversity and abiotic resources, and
- maintaining certain agricultural practices on land that is of nature conservation importance because of these very practices, e.g. certain forms of extensive grazing (SRU 2009, p. 8).

**7.** There are some actors who do not acknowledge the need for greening agricultural policy. The DBV (German Farmers’ Association) takes the view that “agriculture in Germany is already green” (DBV statement during the Bundestag hearing on the CAP reform on 22 October 2012). Furthermore, greening of agricultural policy had already taken place under the previous reform in 2007. In the DBV’s opinion, voluntary measures under the second pillar are sufficient to implement environmental and climate protection concerns in the agricultural sector (Deutscher Bundestag 2012).

**8.** By contrast, scientific studies show that agricultural practices are continuing to have considerable adverse effects on the environment. A few examples of problematic tendencies are listed below (Text Box 1). The SRU therefore sees a continuing need to ensure that the methods and practices of agricultural production are not left entirely to the market.



## Text Box 1

### **Maize growing and its environmental impacts**

In the past, the high consumption of animal products in Germany has already resulted in heavy consumption of land for animal feed production (e.g. maize) (SRU 2012, Chapter 3). Another factor is that for some time now we have seen a rapid increase in maize growing and the use of land for the highly profitable production of biomass for energy generation (2000: 1.5 million hectares, 2012: 2.6 million hectares (DMK 2011)). The massive increase in maize production raises problems for nature conservation in many ways, because it results in reactivation of set-aside areas and ploughing-up of pasture (OSTERBURG et al. 2009, p. 5 and 41–43). The loss of grassland (registered pasture and green fallow land) in Germany between 2007 and 2010 came to 11 % (HOFFMANN et al. 2012b). For example, ploughing-up of grassland gives rise to increased greenhouse gas emissions and water pollution by soluble nitrogen compounds, and also – depending on the land situation – increases the risk of erosion (OSTERBURG et al. 2009, S. 11). Loss of grassland also exacerbates the endangerment situation for birds of open habitats (WAHL et al. 2012; SUDFELDT et al. 2010; HOFFMANN et al. 2012a).

Study results from Brandenburg indicate that in arable farming regions a maize and winter rape share of as little as 10 to 20 % can have adverse effects on indicator bird species and biodiversity (HOFFMANN et al. 2012a). Over the ten years up to 2009, the sub-indicator “agricultural land” of the sustainability strategy’s indicator “Biodiversity and landscape quality” showed a statistically significant development away from the target value (66 % achievement of target value in 2009; Statistisches Bundesamt 2012).

### **Intensification of agriculture and biodiversity**

Agriculture today is largely characterised by a high degree of intensity in crop production. The increasing size of agricultural fields (i.e. the size of continuous areas of arable land bearing a single crop) is resulting in a loss of near-natural small-scale structures such as field shrubs, grassland, broad marginal field strips and small waters embedded in farmland; these, however, are an essential requirement for a great variety of bird species (HOFFMANN et al. 2012a; GUERRERO et al. 2012). In intensive farming, large quantities of pesticides and fertilisers are applied to the land and exert pressure on nature and the environment. Nutrient inputs as site factors for ferns and flowering plants endanger nearly half the flora affected (404 species; BfN 2004, p. 133). Pesticides also endanger the biological diversity of plants in particular, for example through the decline in the number of species in the “seed banks” of farmland soil (ROBINSON and SUTHERLAND 2002). Partly as a result of indirect food chain effects, the number of species of breeding birds on agricultural land has also decreased, something which risk assessments do not take into account (SUDFELDT et al. 2010). The numbers and species composition of non-target organisms such as soil organisms, aquatic organisms and amphibians are on the decline (HAFFMANS 2010; ISENTRING 2010).

### **Ecosystem services and agriculture**

The increasing loss of agro-biodiversity means the loss of important ecosystem services to agriculture in the long term. These include pollination, biological pest control, provision of genetic resources for plant and animal breeding, the maintenance or regulation of the nutrient cycle and the water balance, soil formation and soil protection, erosion control, and climate and flood regulation (DOYLE et al. 2010).

**9.** The CAP is the most comprehensive funding facility for promoting measures aimed at biodiversity maintenance, water conservation and climate protection in the agricultural sector at European level. According to the European Commission’s proposals for the multiannual financial framework, a total of 386.5 billion euros at constant prices (base year 2011) is to be made available for the CAP over the seven-year period 2014 to 2020. Of this figure, 281.8 billion euros is earmarked for direct payments and market-related expenditure

(together making up the first pillar) and 89.9 billion euros for the second pillar (European Commission 2011a, p. 6). By contrast, the financial instrument LIFE+ (financing instrument for the environment) which was created specifically for environmental and climate policy in the EU budget is to be very poorly endowed, with only 3.2 billion euros for the entire funding period (European Commission 2011a, p. 14–18 and 41–45). The proposal by EU Council President van Rompuy envisages a larger reduction in the CAP budget than that proposed by the Commission. For the first pillar the paper envisages 269.8 billion euros (a reduction of 4.8 %) and for the second pillar (rural development policy, including agri-environmental and climate measures) 83.7 billion euros (a cut of 6.9 %) (Council of the European Union 2012a).

**10.** When deciding on the future of the CAP, Article 11 of the Treaty on the Functioning of the European Union (TFEU) must also be taken into account. The purpose of this clause is to ensure that environmental issues are taken into account in all fields of activity of the EU, in order to prevent serious environmental deficits arising from unilateral implementation of other policy areas. In particular, Article 11 of the TFEU requires that decisions in areas external to the environment are not exclusively geared to their specific circumstances, but having regard to their environmental impacts are modified or, in extreme cases, not taken at all (CALLIESS in: CALLIESS/RUFFERT 2011, Art. 11 marginal note 7).

Thus Article 11 establishes the obligation of legislature and administration to take account of the complex tasks of environmental protection by viewing these as a problem-related cross-sectional task and examining the environmental impact of all policies and measures as early as possible. This requires that decisions on environmentally relevant sectoral policies should not be geared exclusively to their specific objectives, but taken having regard to their environmental impacts. Thus in the necessary balancing of interests, environmental concerns must not be “balanced out”, but must be a recognisable element of the policy in question. This tendency can also be seen in decisions by the ECJ on transport policy (EuGH, marginal number C-17/90 (Pinaud Wieger), EuZW 1992, p. 62 and marginal number C-195/90 (Commission/Germany), EuZW 1992, p. 390.)

As already explained, the implementation of the CAP is of central importance for biodiversity conservation and climate protection, which means that simply as a result of Article 11 of the TFEU it is necessary to coordinate agricultural policy with other sectoral policies. If more than 50 billion euros goes to the agricultural sector every year under the CAP (three-quarters of which is for direct payments alone) (European Commission 2012c, p. 18), these funds should also make a contribution to achieving the EU’s targets for 2020 that are laid down in the biodiversity strategy (European Commission 2011b). They should in particular be used to help achieve sub-target 3 A), which is devoted to agriculture (Text Box 2).

## Text Box 2

### **Objectives of the EU biodiversity strategy**

Sub-target 3 A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement(\*) in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU 2010 baseline, thus contributing to enhancing sustainable management.

(\*) For both targets, improvement is to be measured against the quantified enhancement targets for the conservation status of species and habitats of EU interest in Target 1 and the restoration of degraded ecosystems under Target 2.

Source: European Commission 2011b, p. 6-7

**11.** In its statement, the SRU proposed a three-part system of rewards for environmental protection under the CAP, based on the principle of “public money for public goods”. The SRU regards it as the EU’s obligation to finance the necessary changes. One reason for this view is the obligation entered into by the EU in the field of biodiversity conservation and climate protection by signing international conventions such as the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC) (SRU 2009, p. 9). Another is the need to prevent situations where the member states fail to take particularly important environmental protection measures due to lack of budget resources or because they have other priorities.

The three components of the proposed system of rewards are:

- a *basic ecological payment* as a reward for minimum services. The size of this bonus should be geared to the – regionally different – additional costs incurred by farmers for compliance with the requirements, including opportunity and transaction costs, thereby largely avoiding any impact on income. This payment should be fully financed by the EU. The conditions for receiving the basic payment would be:
  - making 10 % of farmland available as ecological focus areas (see also Text Box 3); in certain circumstances this could also include areas covered by agri-environmental measures,
  - compliance throughout the farm with minimum standards ensuring that the land is maintained in a good agricultural and ecological condition. The SRU regards compliance with threefold crop rotation as the most important requirement.
- *Agri-environmental measures* for specific ecological requirements in the member states. This includes implementation of the European and national biodiversity strategies by means of the Natura 2000 system of protected areas in the agricultural and forestry sectors, and the necessary contributions to the targets of the Framework Convention on Climate Change and the Water Framework Directive 2000/60/EC. These should be fully financed by the EU, whereas other measures could be co-financed.

- *Landscape maintenance funds* to promote services which have a land management focus on nature conservation objectives and which are not primarily concerned with agriculture.

### Text Box 3

#### **Ecological focus areas**

Current research shows that the size of the ecological focus areas needed varies depending on the plant or animal species in view. For four bird species of the “Agricultural land” sub-indicator of the “Biodiversity and landscape quality” indicator, the percentages calculated for ecological focus areas needed to stimulate populations are between 8 and 40 % of the arable land area (HOFFMANN et al. 2012a, Table 43). Favourable effects can nevertheless be expected upwards of 5 % of the arable land area (BERGER and PFEFFER 2011).

In order to compensate for the adverse effects of pesticide use on biodiversity, the Federal Environment Agency recommends establishing a minimum share of 10 % for ecological focus areas and raising to 20 % the proportion of total farmland under organic farming (UBA 2010). For cultural landscapes, HOTES and EBERMANN (2010) call for more than 20 % to be near-natural land, in order to achieve a significant increase in pollination services and biological pest control, for example.

### **3 Assessment of the European Commission reform proposals**

**12.** The SRU regards the Commission proposal as an important contribution to biodiversity conservation and climate protection, and as a step forward into a new agricultural funding logic. It welcomes this, provided that the paradigm change towards genuine public services by the agricultural sector in return for public money continues to be pursued in the years to come. The SRU sets out below its comments on the general line of the European Commission proposals for reform. It also discusses selected counter-positions. These include demands by the DBV (German Farmers' Association), and also items from the "Luxembourg Paper" (see Table 1), which according to the Federal Ministry for Food, Agriculture and Consumer Protection was co-drafted by Germany (BMELV 2012), proposals by the European Parliament's Committee on Agriculture and Food, and also key points of the proposal by EU Council President van Rompuy.

#### Plans for greening the first pillar

**13.** The Commission proposal envisages that 30 % of direct payments should be compulsorily tied to compliance with the greening requirements (European Commission 2012a; 2012c, p. 4). At the present time these requirements have yet to be finally defined. According to the Commission proposal, however, one of the requirements is that 7 % of a farm's eligible arable land (i.e. excluding permanent grassland) must be designated as ecological focus areas. Furthermore, conversion of existing permanent grassland is to be limited at farm level to a maximum of 5 % of the reference areas in 2014). The third requirement is crop diversification to at least three crop species, with the main crop limited to 70 % of the area and the crop with the smallest share accounting for at least 5 % (European Commission 2012a, p. 45–47).

The basic approach of the European Commission's three main proposals for the greening requirements is convincing. The SRU basically welcomes the idea of tying direct payments to environmentally relevant requirements that go beyond the existing, insufficient standards (cross-compliance). In its statement "Towards a Common Agricultural Policy (CAP) that meets today's challenges", the SRU (2009) gives a detailed explanation of the benefits arising from Community-wide minimum services in the field of nature conservation and environmental protection. For example, ecological focus areas can help to conserve the diversity of flora and fauna (OPPERMANN 2009, p. 10). Especially in regions with a large proportion of high-intensity agricultural land use, "ecological oases" are important for biodiversity conservation (MERCKX et al. 2009; RODRÍGUEZ and WIEGAND 2009) and serve as "stepping stones" for population interchange and species migration, which is essential for adaptation to climate change (SRU 2009, p. 16).

The requirement to maintain existing permanent grassland prevents the release of carbon stored in the soil and protects those species which depend on grassland as their habitat (WEGENER et al. 2006; FREIBAUER et al. 2009; SRU 2009, p. 17). Thus ecological orientation of direct payments contributes to solving two of the central environmental problems of the 21st century – biodiversity loss and climate change.

**14.** Even in the best case, the greening requirements cannot be more than minimum requirements from a conservation point of view. The SRU takes the view that this is justifiable in principle if the direct payments are, at least in the medium term, reduced sufficiently for them to represent roughly cost-oriented rewards for the public services provided through greening. The resources liberated by reducing the direct payments could then be used to step up the agri-environmental and climate protection measures of the second pillar with their greater steering effect (SRU 2009).

In certain places, however, adjustments to the Commission reform proposal are essential to ensure that the requirements serve to achieve the targets and do not produce any adverse effects. A major point in this connection is the proposal to take 2014 as the reference year for conserving permanent grassland. This should be brought forward. Experience shows that prohibitions relating to a reference year in the future result in people influencing the reference situation with a view to maintaining their freedom of action. Thus there is a risk here that increased amounts of grassland will be ploughed up in 2013, which would run counter to the objectives of greening.

**15.** In this statement the SRU does not discuss in detail individual proposals regarding the greening requirements. Proposals worth considering can be found, for example, in a statement by the Agricultural Committee to the Federal Environment Agency (RIBBE et al. 2012, p. 9–15), and in a statement by the Scientific Advisory Council on Biodiversity and Genetic Resources at the Ministry of Agriculture (BMELV 2012).

#### Compulsory greening of direct payments

**16.** In the present discussion, effective greening of direct payments is being thwarted by significant efforts on the part of various actors. Firstly, there are demands that greening should not be compulsorily tied to the total amount of direct payments (Deutscher Bundestag 2012; European Parliament – Committee on Agriculture and Rural Development 2012, p. 45). Secondly, numerous proposals are being put forward for special arrangements to exempt various farm or management types from the greening requirements (see Table 1). Thirdly, the proposal by EU Council President van Rompuy to allow the member states flexibility in the choice of greening measures (Council of the European Union 2012a, p. 23) involves a risk of watering down the greening effect. The SRU takes the view that none of these three positions serves to achieve the objective of a more environmentally sound CAP.

**17.** While the Commission's proposal only justifies part (30 %) of the direct payments in terms of the greening component, it does not in fact envisage a breakdown into two components, since receipt of the basic component presupposes participation in the greening process: "Farmers entitled to a payment under the basic payment scheme [...] shall observe on their eligible hectares [...] the following agricultural practices beneficial to the climate and the environment [...]" (European Commission 2012a, p. 39 f.).

The SRU is basically of the opinion that in the long term the payments under the CAP should not be used to pursue income policy objectives, and it supports the European Commission's approach as a first step towards this change of direction. However, this makes it all the more important for the entire payment to be tied to compliance with the greening requirements.

Model calculations exist which come to the conclusion that even the prospect of losing 30 % of the direct payments is sufficient incentive for most farms to take part in greening (Top Agrar Online 2012, p. 23–27). This gives the impression that there is no need for the threat of losing the basic component as well in the event of basic non-participation or non-compliance with the requirements. Thus the DBV (German Farmers' Association) calls for greening not to be compulsorily tied to the basic component. The SRU does not share this conclusion. Instead, it sees the model calculation as proof that the cost of implementing the greening requirements arising from the Commission proposals falls far short of the amounts of the direct payments. Thus even with compulsory greening, the direct payments still include a large income component which, in the opinion of the SRU, needs to be reduced gradually in the long term. Thus there should on no account be any entitlement to payments if the farm does not comply with stricter environmental requirements than at present and thereby render more public services to society. Especially in livestock breeding and biogas production regions, which are particularly problematic from an environmental and conservation point of view, tying only 30 % of the direct payments to the greening requirements could result in farmers foregoing the 30 %-greening component, but continuing to receive 70 % of the direct payments without rendering the necessary environmental services to society in return. These conclusions are also suggested by calculations by the Johann Heinrich von Thünen Institute (vTI), which indicate that (in a two-component solution) it can make economic sense for units with intensive livestock farming to forego the greening component (FORSTNER et al. 2012, p. 26–30).

#### Exemption from greening requirements

**18.** The Commission's proposal envisages a special arrangement for organic farms. These farms "should, given the recognised benefits of the organic farming systems, benefit from the 'greening component' without fulfilling any further obligation" (European Commission 2012a, p. 19 f.).

The SRU also considers a special rule for organic farming to be justifiable, because such farming is based on the idea of closed-cycle management, largely refrains from using synthetic chemical fertilisers and pesticides, and operates with smaller livestock numbers per unit area. As a rule, diffuse inputs of pollutants and nutrients are lower in organic farming than in conventional farming, and species diversity is greater in relation to farm area (BENGTSSON et al. 2005; HÖTKER et al. 2004). To a large extent, therefore, organic farming implements the objectives of the ecological focus area on the entire farm, and it can thus be exempted from this greening requirement. Organic farms should not, however, be exempted from the requirement to maintain permanent grassland or from the crop diversification requirement.

19. However, a special rule for organic farming must not result in a large number of other forms of farming which are not comparable also being exempted from the greening requirements. As Table 1 shows, there are numerous proposals for restricting the scope of greening in this way. The SRU takes the view that restrictions – if they are absolutely essential on the grounds of practicability – should be limited such that the original target of establishing 7 % of arable land in the EU as ecological focus areas is achieved as fully as possible. Greening must have a marked environmental impact if direct payments are to be justified at all. Land in Natura 2000 sites without management requirements – to mention only one example – certainly does not meet this requirement.

Table 1

**Proposals for exemption of farms from the greening requirements**

<b>DBV (German Farmers' Association)</b>	<b>Luxembourg paper (14 member states of the Council of Agriculture Ministers, including Germany)</b>	<b>Agriculture and Food Committee of the European Parliament</b>
Farms <ul style="list-style-type: none"> <li>– in mountain areas</li> <li>– in disadvantaged areas</li> <li>– within Natura 2000 sites</li> <li>– with a large proportion of permanent grassland or agri-environmental measures</li> <li>– with voluntary certification systems (including compliance with sustainability standards of the Renewable Energy Directive for Biofuels)</li> </ul>	Farms which <ul style="list-style-type: none"> <li>– are organic farms</li> <li>– are certified as “sustainable”</li> <li>– have more than 50 % permanent pasture</li> <li>– have less than 15 hectares or are smaller than 1/3 of the average size in the member state</li> <li>– have at least 50 % agri-environmental measures</li> <li>– have at least 50 % of their land within Natura 2000 sites</li> </ul>	Farms which <ul style="list-style-type: none"> <li>– take part in agri-environmental and climate measures</li> <li>– take part in national certification systems of ecological value</li> <li>– have less than 20 hectares of arable land</li> </ul>
Source: Deutscher Bundestag 2012; Council of the European Union 2012b; European Parliament – Committee for Agriculture and Rural Development 2012		



## Ecological focus areas

**20.** The benefits of and need for introducing the ecological focus area in European agriculture have already been explained (Text Box 3 and Item 13). One argument repeatedly advanced against the introduction of ecological focus areas is that they result in enforced set-asides and corresponding production losses, which is not justifiable in view of a growing world population and the climate change problem (Deutscher Bundestag 2012).

**21.** The argument that the ecological focus area results in “enforced set-asides” (Deutscher Bundestag 2012, p. 3) is not tenable. In Article 29 (1 c) the Commission proposal merely speaks of farmers having “an ecological focus area on their agricultural area”. By way of example, Article 32 (1) lists land left fallow, terraces, landscape features, buffer strips and afforested areas. Under paragraph 2 the European Commission is to be empowered 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”. It cannot be inferred from this that such areas must take the form of set-asides.

Land use with an ecological focus could also include extensive farming – e.g. according to the proposal by the Scientific Advisory Council on Biodiversity and Genetic Resources at the Ministry of Agriculture (BMELV) without the use of mineral or organic fertilisers and chemical pesticides (Scientific Advisory Council on Biodiversity and Genetic Resources at the BMELV 2012, p. 12). There is no doubt that there will be a loss of yield on a large proportion of such areas, and depending on the design of the requirements this could call into question the profitability of productive use of the land. However, extensive use of the land is basically possible even without the use of fertilisers and chemical pesticides. Here it is up to the resourcefulness of the farmers and their advisors to identify productive uses that satisfy the environmental requirements of greening.

Various actors are currently engaged in research and discussion aimed at arriving at an environmentally effective definition of the term “ecological focus area”, for example the Institute for Agricultural Biology and Biodiversity (lead manager) (IFAB et al. 2012), the Institute for Rural Development Research in a joint project with other European and German partners (IfLS 2012), the Agricultural Committee to the Federal Environment Agency (RIBBE et al. 2012), the Scientific Council for Biodiversity and Genetic Resources at the Ministry of Agriculture (BMELV 2012), and NABU, the German Nature and Biodiversity Conservation Union (NABU 2012). The resulting proposals are to be examined and may then be incorporated in an effective definition of the ecological focus area.

**22.** It is sometimes argued that food security conflicts with an ecological reform of direct payments. In the long term, however, non-sustainable use of natural resources by agriculture endangers the conservation of elementary ecosystem services, which can cause problems in future for agricultural production and hence for food security. For this reason, production

increases today must not be made at the expense of conserving natural resources. A change in consumer habits in the industrialised countries would be a much more sensible way of reducing the pressure on farmland and also achieving positive effects on health (FABER et al. 2012). Model calculations show that a reduction in consumption of animal products could substantially reduce the area of land needed for food (DONNER 2006; WIRSENIUS et al. 2010). As well as changes in food habits, politicians should address the phenomenon of food wastage (SRU 2012, Chapter 3). Estimates indicate that 89 million t of food are lost every year in the EU-27 in the course of the food chain (excluding the agricultural sector). This is a loss of 179 kg per head per year (European Commission – DG Environment 2010).

Food security does not depend solely on the availability of food, but is also dependent to a large extent on factors such as ownership of agricultural land, income distribution, regional agricultural structures or political framework conditions (IAASTD 2009, p. 27 ff.; UN Millennium Project 2005; SEN ca. 2007).

The proposals for a rural development regulation

**23.** The Commission proposal for the Regulation on the European Agricultural Fund for Rural Development (EAFRD) – the new EAFRD Regulation – is absolutely in line with the “Europe 2020” strategy. The aim of the strategy is to “deliver growth that is smart, sustainable and inclusive” (European Commission 2012b, p. 36). The EAFRD Regulation is intended to “contribute to a more territorially and environmentally balanced, climate-friendly and resilient and innovative Union agricultural sector” (op. cit., p. 35).

In the proposal for the new EAFRD Regulation, the funding objectives are broken down into six priorities. Previously there were four funding priorities. What is known as “agri-environmental measures” in the regulation that is valid until the end of 2013 is extended to “agri-environmental and climate protection measures” from 2014 onwards. In future such measures are above all to be funded under the fourth and fifth priorities (Text Box 4).

Text Box 4

**The six priorities for rural development in the Commission’s draft EAFRD Regulation**

1. Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas.
2. Enhancing competitiveness of all types of agriculture and enhancing farm viability.
3. Promoting food chain organisation and risk management in agriculture.
4. Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry.
5. Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in the agriculture, food and forestry sectors.
6. Promoting social inclusion, poverty reduction and economic development in rural areas.

Source: European Commission 2012b, p. 35–36

**24.** The Commission proposal for the EAFRD Regulation also envisages that the second pillar should be made more flexible by leaving it to the member states to determine the relative importance of the priorities in the form of budget allocation as well (European

Commission 2012b; GRAJEWSKI 2011, p. 114). Here the SRU sees a considerable risk that the additional flexibility for the member states could result in reduced funding for protection of the environment. Accordingly, the EAFRD Regulation should lay down a minimum percentage that must continue to be used in future for agri-environmental and climate protection measures – i.e. conservation interests with supra-regional benefits. On no account should the new regulation result in this important sector receiving fewer resources than at present. If the Commission's flexibility proposal is retained, the member states and the federal Länder will bear even greater responsibility than at present for giving the necessary priority to the important tasks of biodiversity maintenance, water conservation and climate protection in the national implementation programs.

**25.** In the opinion of the SRU, the proposal to reduce the co-financing rates for environment and landscape improvement measures from the present level of between 55 and 99 % to a general 50 % (with the exception of less developed regions, the outermost regions and the smaller islands in the Aegean Sea; European Commission 2012b, p. 88) represents a marked change for the worse. The SRU takes a very critical view of this. In its 2009 statement, it proposed that the EU should fully finance a large proportion of the agri-environmental measures to avoid situations where these important measures are not implemented due to shortage of funds in the member states (SRU 2009).

**26.** Also to be rejected is the Commission proposal to allow some countries to reallocate funds on a limited scale from the second to the first pillar (European Commission 2012a), and the even more far-reaching proposal by Council President van Rompuy that all member states should be allowed to reallocate up to 15 % of the funds from the second pillar to the first pillar (Council of the European Union 2012a, p. 24). Even given successful implementation of the Commission's greening proposals, the first pillar is still largely concerned with income policy. In those member states where the agricultural sector has powerful organisations, this could result in the principle of "public money for public goods", which has only recently been cautiously introduced, being abandoned at the expense of environmental protection and nature conservation.

#### Second-pillar agri-environmental and climate measures

**27.** There are two reasons why the agri-environmental and climate measures constitute an important supplement to the greening of the first pillar. They can be used on a highly targeted and region-specific basis, and they permit for area-specific planning. This is indispensable for the protection of sites of special nature conservation value, and can also be used specifically for the establishment of a biotope network.

Studies from seven German Länder indicate that biodiversity protection under the second pillar has so far been implemented primarily on pasture sites and not on arable sites (BATHKE and SANDER 2011). The greening requirements in the first pillar are now to

provide targeted strengthening of biodiversity conservation on arable land and ensure that at least a minimum of nature conservation takes place on prime agricultural sites as well.

**28.** The present ideas about modular assistance must also be assessed in the light of this objective. In this context, modular assistance means joint funding of an area by means of direct payments under the first pillar and agri-environmental and climate measures under the second pillar. This would result in second-pillar measures and the recognition of ecological focus areas being combined on the same land. The SRU basically advocates the approach of modular assistance, because it enables the measures to be geared specifically to the locally prevailing regional problems in the nature conservation sector, which can give rise to greater benefits for society than greening alone.

For example, modular assistance on ecological focus areas can make it possible to achieve more ambitious measures than the defined minimum requirements, thereby creating additional benefit. However, such additional benefit must also be the prerequisite for modular assistance. An additional benefit also arises if the combination of agri-environmental and climate measures with ecological focus areas permits area-specific planning opportunities since farmers can be induced to make available land that is particularly valuable or important from a nature conservation point of view.

**29.** If future efforts succeed in gaining land for agri-environmental and climate protection measures in arable regions as well, this will create a need for more funds in the second pillar. It will thus be necessary to provide the second pillar with better financial resources for such assistance measures. On no account must the funds available for environmental protection and nature conservation in the second pillar be reduced on the grounds that something is already being done for environmental protection and nature conservation on large areas through the greening of the first pillar. Neither through greening alone nor through agri-environmental and climate measures alone is it possible to achieve the environmental and conservation targets area wide, to which the Federal Republic of Germany and the EU have committed themselves under the Habitats Directive 92/43/EEC, the Water Framework Directive and the Framework Convention on Climate Change. The two packages of measures must complement each other.

**30.** As things stand at present, the co-financing obligation means that national sources for co-financing of measures are essential for implementing the funding objectives of the second pillar. In this connection it must be noted that the implementation of agri-environmental and climate measures in Germany also depends to a great extent on whether the Länder have at their disposal a co-financing facility under the “Joint Agreement for the improvement of agricultural structures and coastal protection” (GAK). However, the joint agreement specifically does not cover environmental and nature conservation measures, which means in particular that many contract-based nature conservation measures in the Länder could be called into question if the EU funding rates were to be reduced as envisaged in the

Commission proposal (European Commission 2012a). It would be necessary here to enlarge the spectrum of tasks under the Joint Agreement accordingly. A number of recommendations to decision makers on national implementation of the CAP reform are summarised in Text Box 5.

#### Text Box 5

##### **Key points for national implementation**

To optimise the benefits of the CAP reform for society, the decision makers should take full advantage of the following options in the implementation process:

The greater flexibility in setting priorities for rural development funding should be used to give priority to measures which generate added value for society. Great importance should therefore be attached to agri-environmental and climate measures in the national assistance programs.

Ecological efficiency and effectiveness should be the guiding principle when deciding which specific agri-environmental and climate measures are to be offered. To achieve this, regional environmental conditions must be taken into account in the interests of the subsidiarity principle. Account should also be taken of experience gained locally by farmers, nature conservation and landscape maintenance associations and other stakeholders in the course of assistance measures to date.

Article 38 of the Commission proposal for a Direct Payments Regulation permits support coupled to production for “sectors or regions [...] where specific types of farming or specific agricultural sectors undergo certain difficulties and are particularly important for economic and/or social and/or environmental reasons” (European Commission 2012a, p. 51). The SRU recommends using Article 38 to promote the conservation of agriculture-dependent biodiversity (see Item 11) with first-pillar funds.

#### Flexibility between pillars

**31.** The possibility of reallocating funds from the first to the second pillar or using surplus funds from the first pillar in the second pillar would be very convenient for meeting the need for additional funds for agri-environmental and climate measures. In this connection, two basic proposals are under discussion which could be implemented to supplement this option. Firstly, the Commission proposal would allow the member states to reallocate up to 10 % of their annual national ceiling from the first pillar to the second pillar and to use these funds for agri-environmental and climate measures, among other things (European Commission 2012a, p. 34). In his draft multiannual financial framework, EU Council President van Rompuy envisages the same mechanism, but would like to permit reallocation of up to 15 % (Council of the European Union 2012a, p. 24).

The second basic proposal was put forward by the European Parliament’s Committee on Agriculture and Rural Development. It envisages that unspent funds from the first pillar (direct payments that have been retained due to farms not participating in greening) should be transferred to the second pillar and earmarked for biodiversity conservation and climate protection. Here it should be possible to use such funds without a co-financing requirement (European Parliament – Committee on Agriculture and Rural Development 2012, p. 22–23).

The SRU takes the view that the options for transferring from the first to the second pillar are basically to be welcomed. If farmers do not take part in greening and first-pillar funds therefore remain unspent, this limits the extent to which the environmental effect targeted by greening can be achieved. This is an additional argument for using the unspent funds for biodiversity maintenance, water conservation and climate protection in the second pillar. For this reason the transfer from the first to the second pillar should be earmarked for agri-environmental and climate measures and should be free from the co-financing requirement, particularly in view of the difficult financial situation of many member states and some German Länder, and also differences in priorities.

#### Medium-term financial planning

**32.** As was evident from the EU summit in November 2012, the budget for the CAP is under considerable pressure. There are various reasons for this. For one thing, the national debt crisis in many member states is putting pressure on spending. For another, the legitimacy of the historical basis of assessment for direct payments is steadily diminishing, and intensive farming is continuing to have adverse impacts on nature, especially biodiversity (see Text Box 1). It therefore seems likely that the agricultural budget will be cut.

The proposal by EU Council President van Rompuy for the multiannual financial framework reinforces fears that a cut in the agricultural budget, as happened with the adoption of the EU budget for 2007 to 2013, will lead to a further reduction in funds for rural development and hence for agri-environmental and climate measures. In the budget decisions under the previous reform for the funding period 2007 to 2013, the funds for the second pillar were reduced by nearly a quarter compared with the Commission's original proposals (SRU 2008, p. 458). Van Rompuy now envisages a further reduction of 7 % in second-pillar funds compared with the current Commission proposal (Council of the European Union 2012a). The renewed reduction in second-pillar funds, and also the reallocation of second-pillar funds to finance direct payments, which van Rompuy proposes to offer as an option to the member states (op. cit., p. 24), would further undermine the legitimacy of assistance for agriculture. Support for biodiversity maintenance and climate protection under the second pillar is needed to facilitate fine tuning in view of the great regional differences in nature conservation requirements, and is indispensable for achieving the European environmental targets. It is not the second, but the first pillar that has societal legitimacy problems. Thus if cuts are necessary, the direct payments should be reduced. In view of the ongoing problems, the funds for environmental protection must on no account be reduced, but should in fact be increased (SRU 2009).

## 4 Conclusions

**33.** The coming weeks and months will see decisions being taken which are of great significance for the environmental situation in the rural regions of Europe. In view of its great financial scale and the large proportion of land in Europe that is used by the agricultural sector (approx. 50 % of the total land area is used for agricultural purposes), the European Common Agricultural Policy (CAP) is potentially a highly effective instrument for maintaining ecosystem services. The European Commission has put forward proposals for a new Direct Payments Regulation (first pillar of the CAP) which would introduce a binding requirement tying direct payments to stricter ecological criteria than at present, and thereby strengthen environmental protection on a widespread basis. The Commission has also drafted a regulation for the second pillar of the CAP, which serves the interests of rural development and supports selective, voluntary, regionally adapted agri-environmental and climate measures co-financed by the member states.

**34.** The two proposed regulations are currently the subject of intensive discussion. Greening of direct payments (compulsory ecological focus areas, crop diversification and maintenance of existing permanent grassland) is the centre-piece of the European Commission's reform proposals and the most controversial issue. In the opinion of the German Advisory Council on the Environment (SRU), it is a first step on the way to gearing European agricultural policy to environmental criteria. The Commission's proposals for reform thus represent the start of a system which allocates public money primarily for public services. However, the SRU takes the view that they are only a first step in the right direction and that they must on no account be watered down any further.

By issuing this statement at a crucial phase in the discussion, the SRU therefore wishes to appeal once again to the decision makers in the Länder, at federal level and in the European Council and the European Parliament not to depart from the present reform course for a more environmentally viable agricultural policy. In view of great financial problems in many member states and ever-diminishing public funds, EU expenditure on the agricultural sector can only be justified if it results in much greater attention being paid to environmental and conservation interests and thereby implements the principle of "public money for public goods".

**35.** Only an integrated approach that uses the first and second pillars for the necessary environmental and climate measures is a viable strategy for the future CAP. Ambitious and regionally adapted, but voluntary and selective second-pillar conservation measures must be supplemented by widespread improvements in nature conservation by means of the greening requirements for direct payments under the first pillar. For this reason the argument that environmental and climate protection are supported under the first pillar must not be used in this reform step to cut funds for these purposes in the second pillar.

**36.** At the present stage of negotiations it is not yet possible to tell what scope the member states will be given for environmental orientation of agricultural funding when implementing the regulation, for example options for reallocating funds between the two pillars or increased flexibility in the use of funds under the second pillar. The SRU appeals to the member states and the actors responsible for transposition into national law to flesh out new degrees of freedom to be used for the benefit of nature and hence of society as a whole.

**37.** The SRU specifically recommends observing the following principles in the course of the reform discussions:

- The essential elements of greening should be adhered to, in order to ensure that the necessary environmental change of direction takes place and that ecosystem services on agricultural land are maintained in the long term.
- Greening must be compulsory, and disbursement of all direct payments must be tied to participation in greening. Direct payments should only be paid if the requirements are met, and sanctions must apply to the full amount of direct payments.
- If exceptions are introduced, these must be transparent and well founded. They must not endanger the environmental objectives of greening.
- The co-financing rates for agri-environmental measures should not be reduced.
- Reallocation or transfer of funds from the first pillar to the second makes sense, provided these are earmarked for agri-environmental and climate measures.

Departing from these principles would not only result in a further deterioration of the environmental situation in agricultural countryside, but would also undermine the legitimacy of the direct payments. The massive resources used for this purpose cannot be justified unless the recipients provide substantial services in return.



## Bibliography

Bathke, M., Sander, A. (2011): Erkenntnisse der Halbzeitbewertung aus 6 Programmen: Bewertung der Naturschutzinstrumente Agrarumweltmaßnahmen und investive Vorhaben aus Sicht der Evaluation. Vortrag, Workshop: „ELER, Naturschutz und Natura 2000 – Fulda-Workshop-Reihe“, 13.–14.04.2011, Göttingen.

Bengtsson, J., Ahnstrom, J., Weibull, A. C. (2005): The effects of organic agriculture on biodiversity and abundance: A meta-analysis. *Journal of Applied Ecology* 42 (2), p. 261–269.

Berger, G., Pfeffer, H. (2011): Naturschutzbrachen im Ackerbau. Anlage und optimierte Bewirtschaftung kleinflächiger Lebensräume für die biologische Vielfalt. Praxishandbuch. Brandenburg: Natur und Text.

BfN (Bundesamt für Naturschutz) (2004): Daten zur Natur 2004. Bonn: BfN.

BMELV (Federal Ministry of Food, Agriculture and Consumer Protection) (2012): Entscheidung über die GAP nach 2013 – Verfahren und Zeitplan. Berlin: BMELV. <http://www.bmelv.de/SharedDocs/Standardartikel/Landwirtschaft/Agrarpolitik/GAP-Reform-Entwicklung.html> (12.11.2012).

Calliess, C., Ruffert, M. (Ed.) (2011): EUV/AEUV. Das Verfassungsrecht der Europäischen Union mit Europäischer Grundrechtecharta. Kommentar. 4. Aufl. München: Beck.

Deutscher Bundestag (2012): Stellungnahme des Deutschen Bauernverbands e.V. (DBV) für die 78. Sitzung des Ausschusses für Ernährung, Landwirtschaft und Verbraucherschutz zur Öffentlichen Anhörung zum Thema: “GAP-Reform”. Berlin: Deutscher Bundestag, Ausschuss für Ernährung, Landwirtschaft und Verbraucherschutz.

DMK (Deutsches Maiskomitee) (2011): Bedeutung des Maisanbaues in Deutschland. Bonn: DMK. <http://www.maiskomitee.de/web/public/Fakten.aspx/Statistik/Deutschland> (14.11.2012).

Donner, S. D. (2006): Surf or turf: A shift from feed to food cultivation could reduce nutrient flux to the Gulf of Mexico. *Global Environmental Change* 17 (1), p. 105–113.

Doyle, U., Vohland, K., Ott, K. (2010): Biodiversitätspolitik in Deutschland. Defizite und Herausforderungen. *Natur und Landschaft* 85 (7), p. 308–313.

European Commission (2012a): Corrigendum: Vorschlag für eine Verordnung des Europäischen Parlaments und des Rates mit Vorschriften über Direktzahlungen an Inhaber landwirtschaftlicher Betriebe im Rahmen von Stützungsregelungen der Gemeinsamen Agrarpolitik. COM (2011) 625 final, p. 2. Brussels: European Commission.

European Commission (2010b): Corrigendum: Vorschlag für eine Verordnung des Europäischen Parlaments und des Rates über die Förderung der ländlichen Entwicklung durch den Europäischen Landwirtschaftsfonds für die Entwicklung des ländlichen Raums (ELER). COM (2011) 627 final, p. 2. Brussels: European Commission.

European Commission (2010c): Geänderter Vorschlag für eine Verordnung des Rates zur Festlegung des mehrjährigen Finanzrahmens für die Jahre 2014–2020. COM (2012) 388 final. Brussels: European Commission.

European Commission (2012d): Mitteilung der Europäischen Kommission an das Europäische Parlament, den Rat, den Europäischen Wirtschafts- und Sozialausschuss und den Ausschuss der Regionen. Vereinfachung: Erster Fortschrittsanzeiger für den MFR 2014–2020. COM (2012) 531 final. Brussels: European Commission.

European Commission (2011a): Mitteilung der Kommission an das Europäische Parlament, den Rat, den Europäischen Wirtschafts- und Sozialausschuss und den Ausschuss der Regionen. Ein Haushalt für „Europe 2020“ – Teil II: Politikbereiche im Überblick. COM(2011) 500 final, Brussels: European Commission.

European Commission (2011b). Mitteilung der Kommission an das Europäische Parlament, den Rat, den Europäischen Wirtschafts- und Sozialausschuss und den Ausschuss der Regionen. Lebensversicherung und Naturkapital: Eine Biodiversitätsstrategie der EU für das Jahr 2020. COM (2011) 244 final, Brussels: European Commission.

European Commission (2010): Mitteilung der Kommission an das Europäische Parlament, den Rat, den Europäischen Wirtschafts- und Sozialausschuss und den Ausschuss der Regionen. Die GAP bis 2020: Nahrungsmittel, natürliche Ressourcen und ländliche Gebiete – die zukünftigen Herausforderungen. COM (2010) 672, p. 5. Brussels: European Commission.

European Commission – Generaldirektion Landwirtschaft und ländliche Entwicklung (2012): Landwirtschaft und Umwelt. Brussels: Europäische Kommission. [http://ec.europa.eu/agriculture/envir/index\\_de.htm](http://ec.europa.eu/agriculture/envir/index_de.htm) (14.11.2012).

European Commission – Generaldirektion Umwelt (2010): Preparatory study on food waste across EU-27. Final report. Brussels: Europäische Kommission, Generaldirektion Umwelt. Technical report 2010-054.

European Parliament – Ausschuss für Landwirtschaft und ländliche Entwicklung (2012): Entwurf eines Berichts über den Vorschlag für eine Verordnung des Europäischen Parlaments und des Rates mit Vorschriften über Direktzahlungen an Inhaber landwirtschaftlicher Betriebe im Rahmen von Stützungsregelungen der Gemeinsamen Agrarpolitik. Brussels: European Parliament.

Faber, J., Svenster, M., Markowska, A., Smit, M., Zimmermann, K., Soboh, R., 't Riet, J. van (2012): Behavioural Climate Change Mitigation Options. Domain Report Food. Delft: CE Delft.

Forstner, B., Deblitz, C., Kleinhans, W., Nieberg, H., Offermann, F., Röder, N., Salomon, P., Sanders, J., Weingarten, P. (2012): Analyse der Vorschläge der EU-Kommission vom 12. Oktober 2011 zur künftigen Gestaltung der Direktzahlungen im Rahmen der GAP nach 2013. Braunschweig: Johann Heinrich von Thünen-Institut. Arbeitsberichte aus der vTI-Agrarökonomie 04/2012.

Freibauer, A., Drösler, M., Gensior, A., Schulze, E.-D. (2009): Das Potenzial von Wäldern und Mooren für den Klimaschutz in Deutschland und auf globaler Ebene. *Natur und Landschaft* 84 (1), p. 20-25.

Grajewski, R. (Ed.) (2011): Ländliche Entwicklungspolitik ab 2014. Eine Bewertung der Verordnungsvorschläge der Europäischen Kommission vom Oktober 2011. Braunschweig: Johann Heinrich von Thünen-Institut. Arbeitsberichte aus der vTI-Agrarökonomie 08/2011.

Guerrero, I., Morales, M. B., Oñate, J. J., Geiger, F., Berendse, F., Snoo, G. de, Eggers, S., Pärt, T., Bengtsson, J., Clement, L. W., Weisser, W. W., Olszewski, A., Ceryngier, P., Hawro, V., Liira, J., Aavik, T., Fischer, C., Flohre, A., Thies, C., Tschardtke, T. (2012): Response of ground-nesting farmland birds to agricultural intensification across Europe: Landscape and field level management factors. *Biological Conservation* 152, p. 74–80.

Haffmans, S. (2010): Auswirkungen chemisch-synthetischer Pestizide auf die biologische Vielfalt. Hamburg: Pestizid Aktions-Netzwerk e.V.

Hoffmann, J., Berger, G., Wiegand, I., Wittchen, U., Pfeffer, H., Kiesel, J., Ehlert, F. (2012a): Bewertung und Verbesserung der Biodiversität leistungsfähiger Nutzungssysteme in Ackerbaugebieten unter Nutzung von Indikatorvogelarten. Kleinmachnow: Julius Kühn-Institut. Berichte aus dem Julius Kühn-Institut 163.

Hoffmann, J., Wiegand, I., Berger, G. (2012b): Rückgang des Graslands schränkt Lebensraum für Agrarvögel zunehmend ein. Graslandfunktionen für Indikatorvogelarten in ackerbaudominierten Gebieten. Naturschutz und Landschaftsplanung 44 (6), p. 179–185.

Hotes, S., Ebermann, V. (2010): BIOLOG. Biodiversität und Globaler Wandel. München: oekom.

Hötker, H., Rahmann, G., Jeromin, K. (2004): Positive Auswirkungen des Ökolandbaus auf Vögel der Agrarlandschaft – Untersuchungen in Schleswig-Holstein auf schweren Ackerböden. In: Rahmann, G., Elsen, T. van (Ed.): Naturschutz als Aufgabe des Ökologischen Landbaus Braunschweig: FAL. Landbauforschung Völkenrode, Sonderheft 272, p. 43–59.

IAASTD (International Assessment of Agricultural Knowledge Science and Technology for Development) (2009): Global report. Washington, DC: Island Press.

IFAB (Institut für Agrarökologie und Biodiversität), ZALF (Leibniz-Zentrum für Agrarlandschaftsforschung), HFR (Hochschule für Forstwissenschaft Rottenburg) (2012): Gemeinsame Agrarpolitik ab 2014: Perspektiven für mehr Biodiversitäts- und Umweltleistungen der Landwirtschaft? Empfehlungen der Politik aus dem F&E Vorhaben "Reform der Gemeinsamen Agrarpolitik (GAP) 2013 und Erreichung der Biodiversitäts- und Umweltziele". Mannheim, Müncheberg, Rottenburg: IFAB, ZALF, HFR.

IfLS (Institut für ländliche Strukturforchung) (2012): Konkretisierung des Konzepts ökologischer Vorrangflächen. Frankfurt am Main: IfLS. <http://www.ifls.de/projekt-107.html> (14.11.2012).

Isenring, R. (2010): Pesticides reduce biodiversity. Pesticide News 88 (June 2010), p. 4–7.

Merckx, T., Feber, R. E., Riordan, P., Townsend, M. C., Bourn, N. A. D., Parsons, M. S., Macdonald, D. W. (2009): Optimizing the biodiversity gain from agri-environment schemes. Agriculture, Ecosystems & Environment 130 (3–4), p. 177–182.

NABU (Naturschutzbund Deutschland) (2012): Naturverträgliche Nutzung Ökologischer Vorrangflächen – ein Mehrwert für Biodiversität und Landwirtschaft? Fachtagung am 06. November 2012. Berlin: NABU.

Oppermann, R. (Ed.) (2009): Gemeinsame Agrarpolitik: Cross Compliance und Auswirkungen auf die Biodiversität. Ergebnisse eines Forschungsprojektes und Empfehlungen zur Weiterentwicklung der Agrarpolitik. Mannheim: Institut für Agrarökologie und Biodiversität.

Osterburg, B., Nitsch, H., Laggner, B., Roggendorf, W. (2009): Auswertung von Daten des Integrierten Verwaltungs- und Kontrollsystems zur Abschätzung von Wirkungen der EU-Agrarreform auf Umwelt und Landschaft. Braunschweig: Johann Heinrich von Thünen-Institut. Arbeitsberichte aus der vTI-Agrarökonomie 07/2009.

Council of the European Union (2012a) Note: from the General Secretariat of the Council to the Permanent Representatives Committee / Council. Subject: European Council (22–23 November 2012) – Draft conclusions. Brussels: Council of the European Union. 15602/12, Co EUR-Prep 38.

Council of the European Union (2012b): Proposal for a Regulation of the European Parliament and of the Council establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy (CAP Reform) – Working document from the Luxembourg delegation. Brussels: Council of the European Union. 2011/0280 (COD), 9283/12.

Ribbe, L., Freibauer, A., Güthler, W., Heißenhuber, A., Hülsbergen, K.-J., Krug, A., Wiggering, H., Meyer, H. von, Peterwitz, U. (2012): Die Legislativ-Vorschläge zur GAP-Reform. Gute Ansätze, aber für die Umwelt nicht gut genug. Stellungnahme der Kommission Landwirtschaft am Umweltbundesamt (KLU). Dessau-Roßlau: Federal Environment Agency.

Robinson, R. A., Sutherland, W. J. (2002): Post-war changes in arable farming and biodiversity in Great Britain. *Journal of Applied Ecology* 39 (1), p. 157-176.

Rodríguez, C., Wiegand, K. (2009): Evaluating the trade-off between machinery efficiency and loss of biodiversity-friendly habitats in arable landscapes: The role of field size. *Agriculture, Ecosystems & Environment* 129 (4), p. 361–366.

Sen, A. (ca. 2007): *Poverty and Famines. An Essay on Entitlements and Deprivation*. Reprint. Oxford: Oxford University Press.

SRU (Advisory Council on the Environment) (2012): *Umweltgutachten 2012. Verantwortung in einer begrenzten Welt*. Berlin: Erich Schmidt.

SRU (2009): *Für eine zeitgemäße Gemeinsame Agrarpolitik (GAP)*. Berlin: SRU. Stellungnahme 14.

SRU (2008): *Umweltgutachten 2008. Umweltschutz im Zeichen des Klimawandels*. Berlin: Erich Schmidt.

Federal Statistical Office (2012): *Umweltökonomische Gesamtrechnungen. Nachhaltige Entwicklung in Deutschland. Indikatoren zu Umwelt und Ökonomie 2012*. Wiesbaden: Statistisches Bundesamt.

Sudfeldt, C., Dröschmeister, R., Langgemach, T., Wahl, J. (2010): *Vögel in Deutschland 2010*. Münster, Bonn, Güstrow: Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz, Länderarbeitsgemeinschaft der Vogelschutzwarten.

Top Agrar Online (2012): *Was das Greening kostet*. Top Agrar Online 2012 (7), p. 23–27. <http://www.topagrar.com/archiv/Was-das-Greening-kostet-867137.html> (08.01.2012).

UBA (Umweltbundesamt) (2010): *Umsetzung der Verordnung (EG) 1107/2009 und der Richtlinie 128/2009/EG in Deutschland: Maßnahmen zum Schutz der biologischen Vielfalt auf Agrarflächen vor den Auswirkungen der Anwendung von Pflanzenschutzmitteln*. Dessau-Roßlau: UBA. [http://www.nap-pflanzenschutz.de/fileadmin/SITE\\_MASTER/content/Dokumente/Grundlagen/Stellungnahmen/c13fe\\_Positionspapier\\_UBA\\_PSM\\_und\\_Biodiv\\_2010-08-31\\_final.pdf](http://www.nap-pflanzenschutz.de/fileadmin/SITE_MASTER/content/Dokumente/Grundlagen/Stellungnahmen/c13fe_Positionspapier_UBA_PSM_und_Biodiv_2010-08-31_final.pdf) (14.11.2012).

UN Millennium Project (2005): *Halving hunger: it can be done*. Task Force on Hunger. London, Sterling, Va.: Earthscan.

Wahl, J., Dröschmeister, R., Langgemach, T., Sudfeldt, C. (2012): *Vögel in Deutschland 2011*. Münster, Bonn: Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz, Länderarbeitsgemeinschaft der Vogelschutzwarten.

Wegener, J., Lücke, W., Heinzemann, J. (2006): Analyse und Bewertung landwirtschaftlicher Treibhausgas-Emissionen in Deutschland. *Agrartechnische Forschung* 12 (6), p. 103–114.

Wirsenius, S., Azar, C., Berndes, G. (2010): How much land is needed for global food production under scenarios of dietary changes and livestock productivity increases in 2030. *Agricultural Systems* 103 (9), p. 621–638.

Wissenschaftlicher Beirat für Biodiversität und Genetische Ressourcen beim Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz (2012): Ökologische Vorrangflächen zur Förderung der Biodiversität – Bedeutung, Bewirtschaftung, Ausgestaltung. Statement. Bonn: Wissenschaftlicher Beirat für Biodiversität und Genetische Ressourcen beim BMELV. Unpublished document.

## List of Abbreviations

BMELV	=	Federal Ministry of Food, Agriculture and Consumer Protection
CAP	=	Common Agricultural Policy
CBD	=	Convention on Biological Diversity
DBV	=	Deutscher Bauernverband (German Farmers' Association)
EAFRD	=	European Agricultural Fund for Rural Development
ECJ	=	European Court of Justice
EU	=	European Union
EuZW	=	Europäische Zeitschrift für Wirtschaftsrecht (European Journal of Business Law)
GAK	=	Gemeinschaftsaufgabe Agrarstruktur und Küstenschutz (Joint Agreement on Agricultural Structures and Coastal Protection)
IfLS	=	Institut für ländliche Strukturforchung (Institute for Rural Development Research)
LIFE+	=	Financial Instrument for the Environment (under Regulation (EC) No. 614/2007)
NABU	=	Naturschutzbund Deutschland (German Nature and Biodiversity Conservation Union)
SRU	=	Sachverständigenrat für Umweltfragen Advisory Council on the Environment
TFEU	=	Treaty on the Functioning of the European Union
UN	=	United Nations
vTI	=	Johann Heinrich von Thünen Institute



**German Advisory Council on the Environment**  
**Luisenstrasse 46, 10117 Berlin, Germany**  
**Phone +49 (0)30 / 26 36 96-0, Fax +49 (0)30 / 26 36 96-109**  
**Website: [www.umweltrat.de](http://www.umweltrat.de), E-mail: [info@umweltrat.de](mailto:info@umweltrat.de)**