SRU German Advisory Council on the Environment

Towards a Common Agricultural Policy that meets today's challenges

Statement

November 2009 Nr. 14

ISSN 1612-2968

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Summary

With regard to its long-term structure beyond 2013, the EU Common Agricultural Policy (CAP) has reached an important juncture. This is prompted partly by the negotiations on the new funding period 2014 to 2020 and partly by the fact that the EU Regulation on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) expires at the end of 2013.

Climate change and biodiversity loss are the two foremost environmental challenges of the 21st century. Due to its intensification and industrialisation, agriculture – which for hundreds of years has contributed to preserving existing and creating new habitats for many species – has become one of the key factors in the threat to biodiversity in Germany, Europe and the rest of the world. Agriculture also produces not insignificant quantities of the nitrous oxide and methane emissions which contribute to climate change. In sum, land uses and land use changes have a considerable impact on the climate.

The use of land for farming will continue to impact considerably on the climate and on biodiversity. Hence, the existing CAP must be further developed into an environment-focused agricultural policy in which the distribution of funding is closely linked to the provision of public goods. Of all the public goods that agriculture must provide, the most important are nature conservation and environmental protection. In this regard, the German Advisory Council on the Environment (hereafter the Council or SRU) is convinced that not all agricultural practices produce public goods per se. Particularly in economically fully rationalised farming, the production of public goods incurs costs (including opportunity costs). Only farms that bear these costs should be rewarded for doing so. Redirecting CAP funding in this way is a prerequisite in ensuring that agriculture can make a more positive contribution to protecting nature and the environment.

The Council thus proposes an overall model for agriculture which goes beyond pure production of food and security of supply. The aim is that land management should be more closely linked with restoring and securing positive external effects and reducing negative external effects. SRU sees an urgent need for action in the following areas:

– Fulfilling minimum requirements of environmental protection and nature conservation, including in intensively farmed high-yield locations.

– Maintaining extensive agricultural production with its positive effects on biodiversity and abiotic resources.

– Maintaining specific agricultural practices on land which is deemed valuable because of these practices and is threatened by the suspension of such use.

The CAP must be restructured to meet these goals in future. The Council thus proposes the introduction of three forms of payments:

– A basic payment for the provision of environmental services, paid out for the provision of 10 percent of farmed land as ‘ecological compensation areas’ and for maintaining minimum requirements.

– Agri-environmental measures which continue to implement targeted environmental obligations in the Member States.

– Promotion of nature conservation services, which are not necessarily linked to agricultural activities through landscape conservation funding.

This strategy also creates new income opportunities for farms, because rewarding nature conservation and environmental protection as public goods offers farmers in disadvantaged regions an additional source of income and an opportunity to diversify. By demanding a product in the form of nature conservation and environmental protection, the state communicates to farmers that it values and rewards their conscious decision to safeguard these public goods. Farmers are then seen by the public not as subsidy recipients, but as producers – which is how farmers traditionally see themselves.

Foreword

The EU Common Agricultural Policy (CAP) has reached an important juncture. After a series of smaller amendments resulting from the Health Check performed in 2008, attention is now focused on the longer-term structure of the CAP beyond 2013. This is prompted partly by the negotiations on the new funding period (financial perspective 2014 to 2020) and partly by the fact that the EU Regulation on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) expires at the end of 2013. Because further reform of the CAP calls for complex debate and negotiation between a wide range of national and European actors, it is important that the debate on the future of EU agricultural policy commences as soon as possible. In this Statement, the German Advisory Council on the Environment (SRU) takes up the issue of the type of environmental protection and nature conservation requirements any reform of EU agricultural policy must comply with and puts forward suggestions on where the main focus of the CAP should lie in future.

Contract nature conservation measures and compensation payments have only been used in forestry in very limited scope. Thus, the examples used in this Statement are taken from the agricultural sector. Nonetheless, the Council wishes to emphasise the importance of expanding such programmes to take in forest areas.

In the following, the current status of the debate will be addressed first (Section 1). This is then followed by the Council's position on the restructuring of the CAP (Section 2). Section 3 sets out detailed justifications for this approach.

1 The pending reform of EU Common Agricultural Policy

1. The emerging debate on the future of EU agricultural policy, which will intensify over the coming years, has two closely related dimensions: the financial and the substantive. The current financial perspective ends in 2013 and must be continued with a new financial framework. The European Commission also intends to reform the budget to take better account of European Union (EU) policy goals and make the financial planning process more flexible, transparent and efficient. On the whole, it can be expected that during negotiations, many actors will work towards cutting the agricultural budget in order to free up more funds for other priorities (particularly climate change, research and cohesion policy) (European Commission 2008a).

Up to now, the CAP has been one of the biggest items in the EU budget: by 2013, the share of expenditure for CAP (excluding rural development) will amount to around 32 percent, 35.7 percent will be allocated for cohesion policy and funds for other policies (competitiveness, foreign policy and rural development) will be increased to 26 percent (European Commission 2007a). Funding is now increasingly based on Member States' gross national income (GNI) (74 percent in 2003) and less than it has previously been the case on traditional national resources (customs charges and agricultural revenues; 12 percent in 2013) and national value added tax-based funding (12 percent in 2013).

Given the large share of GNI-based funding, the Member States tend to assess EU policies in relation to how much of their national contributions flow back into their own countries. Hence, the question of distribution between the Member States will also play a role in the future of agricultural funding. This conflict is being exacerbated by EU expansion, which results in lower direct payments for existing Member States and adds to the agenda the reform of existing distribution structures rooted in past circumstances.

But the current controversy concerning CAP is not only about funding distribution. It also reflects the differing standpoints as to the goals and instruments of EU agricultural policy. Talks focus on whether the three pillars – rural development, agriculture promotion and environmental protection and nature conservation – should be separated. At the same time, the question arises as to where the common issues lie and where the borders are drawn between EU policy aims and those of the Member States: what components of nature conservation and what components of climate protection are to be funded in what proportions from EU and Member State resources.

2. An analysis of positions and strategy papers on the future of the CAP shows that a certain consensus has formed regarding the need for reform (BMELV 2009a, BMLFUW and AIZ 2009, BUREAU and MAHÉ 2005, Council of the European Union 2009, European Commission 2007b, Alliance Environnement 2007). Central areas of focus for reform take in the following:

– European agriculture should be made more competitive to make it less dependent on state support in the longer term.

– Some of the instruments currently in use (particularly export subsidies and coupled direct payments) are not only problematic in terms of trade policy; they are not very effective when it comes to achieving agricultural policy aims.

– The historical assessment basis for direct payments is increasingly losing its legitimacy.

– The CAP should be simplified to reduce the high administrative costs and achieve the agricultural policy goals in the most effective way possible.

– Public funds should in future be more incentive focused and linked to targeted provision of public goods.

A particularly controversial issue involves the extent, to which the agricultural sector should continue to receive assistance, how much liberalisation and structural change agriculture can be expected to cope with, and whether it is really the task of EU agricultural policy to pursue income and social policy aims. Many actors (especially representatives of agricultural interests and also many EU governments) are convinced that EU direct payments will continue to be necessary in future to secure farmers' incomes, set a minimum standard for environmental protection and nature conservation in land use, preserve quality of life in rural areas and ensure supply security (BMELV 2009a; Ministère de l'Agriculture et de la Pêche 2008). By way of contrast, a considerable number of Member States, researchers and social actors call for underlying reform. Many share the belief that decoupled direct payments without socially relevant returns can no longer be legitimised and must be withdrawn in the medium term or at least undergo radical restructuring (Wissenschaftlicher Beirat Agrarpolitik beim Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz 2005; BUREAU und MAHÉ 2005; HM Treasury and DEFRA 2005; MinLNV 2008; LUPG 2009; NABU 2006; WWF 2008).

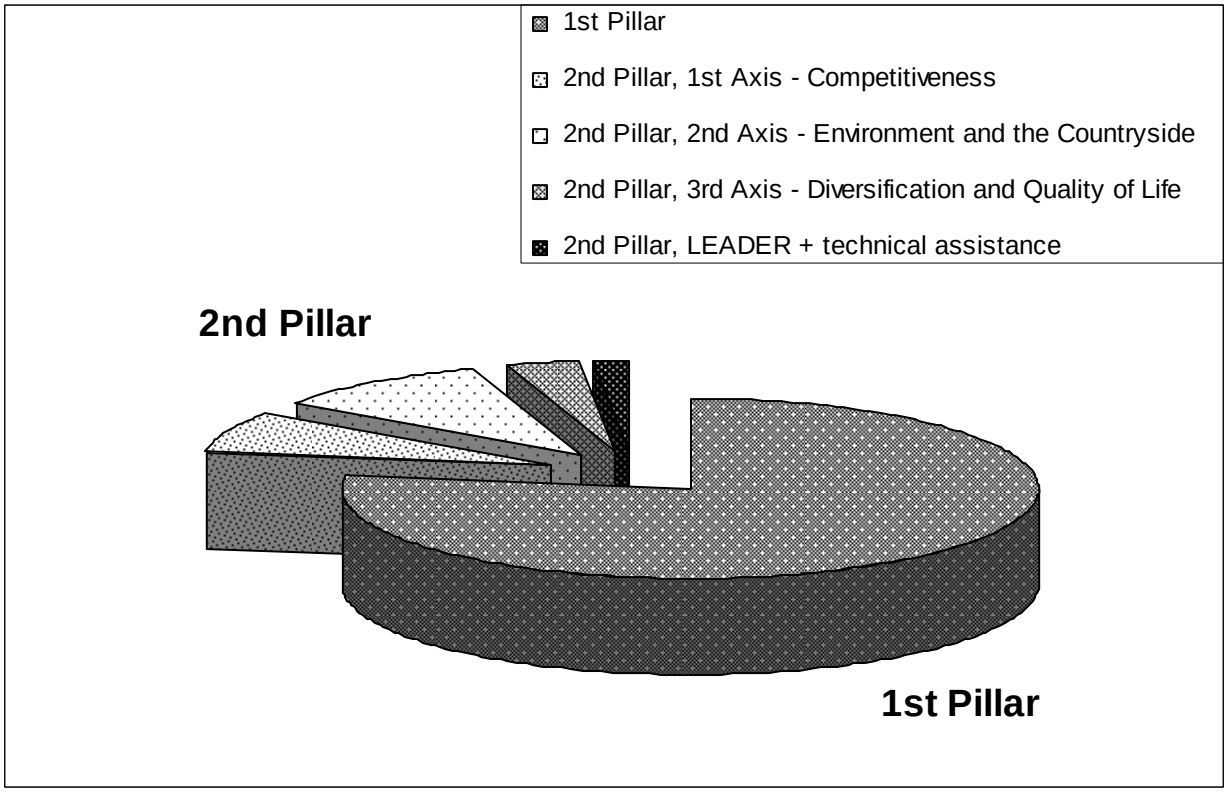
The Council is convinced that the question of European agriculture's ability to perform environmental protection and nature conservation services has not been sufficiently addressed by the key agricultural policy actors. Given the unsolved and in some cases worsening environmental problems, linking payments to environmental services must be the foremost aim of CAP reform: loss of biodiversity is increasing apace, not least due to agricultural intensification and industrialisation. The EU target of halting biodiversity loss by 2010 will not be achieved (EEA 2009). Due to changes in climatic conditions, functioning, adaptable ecosystems will become increasingly important in agriculture. Finally, agriculture must contribute to reducing greenhouse gas emissions.

From an environmental protection and nature conservation standpoint, there is no alternative to this new approach to CAP because – with the exception of LIFE (L'Instrument Financier pour l'Environnement, the EU's financial instrument for supporting environmental and nature conservation projects) – EU policy provides no other means of funding, making the CAP the biggest and, in respect of its broad geographical reach, the most relevant financing option. Also, to reduce the extent and impact of climate change, there are no other policy instruments available for use in connection with land uses. The aim of a reformed CAP, therefore, should not be simply to make EU agricultural policy cost-effective, WTO-compliant and unbureaucratic, but more importantly to secure environmentally sound agriculture and land use.

3. The current EU agricultural budget does not adequately reflect the importance of these challenges. A good three-quarters of the overall agricultural budget (2007 to 2013, without cofinancing and without modulation following the health check) falls to the first pillar (Fig. 1). Funding for the first pillar largely benefits farmers by way of direct payments. These are paid on the basis of historical entitlements and leave environmental aspects out of the picture. The second pillar serves rural development and makes for almost 23 percent of the agricultural budget. From this programme, numerous measures are funded which along with competitiveness in the agricultural and forestry sectors, and quality of life in rural areas, also serve to improve the environment and promote land management. More than 10 percent of the overall budget falls to the latter cited priority (the second axis), which places particular focus on agri-environmental measures.

Figure 1

EU agricultural budget 2007 – 2013 (EU–25)



SRU/Statement No. 14–2009/Fig. 1;
data source: Rat der Europäischen Union 2005 (excluding modulation following the Health Check), Euronature (written statement dated 24 January 2008, excluding modulation following the Health Check, excluding Romania and parts of Spain, excluding national cofinancing)

2 SRU position: payments solely in return for services to the public

4. Climate change and biodiversity loss are the two foremost challenges of the 21st century to be influenced by land use in agriculture. The extent to which protective measures can be successfully implemented will have a direct impact on people's living conditions not just in the near future, but over a period of centuries. While biodiversity loss is already (more or less successfully) addressed in EU policy (European Commission 2008b), a framework for adjustment to climate change is a relatively recent addition (European Commission 2009b). Given the CAP's extremely broad reach, both challenges must be coherently reflected in it if the chosen goals are to be achieved.

2.1 Aims of environmental protection and nature conservation

5. The aim of international biodiversity policy is to significantly reduce current rates of biodiversity loss at global, regional and national level by 2010 (CBD 2002, 2004). In May 2006, the European Commission presented its revision of the EC Biodiversity Strategy of 1998, entitled 'Halting the Loss of Biodiversity by 2010 and Beyond', (European Commission 2006). The EU target of halting biodiversity loss by 2010 (Halting the loss of biodiversity by 2010, Gothenburg Summit 2001) is more fundamental and more stringent than the internationally formulated goal of reduction per se. This self-prescribed target will not be reached (European Commission 2009c, Deutscher Bundestag 2009).

Without greater in-situ protection of biodiversity in Germany and elsewhere in Europe, this target will not be any more reachable in future. Agriculture plays a key role in this regard, because around 42 percent of land in Europe is used for farming. The aim of Germany's biodiversity strategy (in relation to agriculture) is to significantly increase biodiversity in agri-ecosystems, increase the share of areas with valuable farming habitats (e.g. high quality grassland and sparse orchards) and near-natural landscape elements (such as hedges, field boundaries, thickets and small waterbodies), securing and increasing wild species typical of managed cultural landscapes, and securing biodiversity in the face of threats arising from genetically modified organisms.

To mitigate the impacts of climate change, it is vital that all system components will be tackled (European Commission 2009b). Nature conservation-compliant land use reduces its sensitivity to climate change and improves both water supply and nutrient cycles in terrestrial ecosystems (Freibauer et al 2009, Dister and Henrichfriese 2009).

Under the Kyoto Protocol, sectors like agriculture which are not covered by the Emissions Trading Scheme must reduce their emissions. Thus, it is important to promote land uses in agriculture and forestry which also serve climate change mitigation. Forests, bogs, mires and fens harbour the greatest carbon reserves per hectare, both globally and in Europe. These ecosystems should thus be a priority aim in measures to protect the environment and conserve nature (Freibauer et al 2009, Vohland et al 2008, SRU 2008, Section 3.7).

6. Agriculture must therefore take on a broader and clearly altered spectrum of duties which also includes ecological aspects and environmental services like biodiversity, soil fertility, carbon capture, flood protection, water quality and social and cultural issues (jobs, recreation, etc.). The Council therefore proposes an overall model for agriculture which goes beyond pure production of food and ensuring supply security. It is essential that management of the landscape will be more closely linked with restoring and securing positive external effects and reducing negative external ones. The Council thus sees an urgent need for action in the following areas:

– Fulfilling minimum environmental protection and nature conservation requirements, including in intensively farmed high-yield areas.

– Maintaining extensive agricultural production with its positive effects on biodiversity and abiotic resources.

– Maintaining specific agricultural practices on land which is deemed valuable because of these practices and is threatened by suspension of such use.

The CAP must be restructured to meet these goals in future. Given a range of negative environmental effects arising from current agricultural practices, this must on the one hand occur by regulatory means (or levies and certificates) – an issue not addressed in this Statement. On the other, positive external effects arising from such land uses must be rewarded.

While dispensing with purely income-focused payments, payments to agriculture must in future be linked to the provision of services to society that are not already remunerated by the market: the provision of public goods (see Section 3.3) is at present the only legitimisation for payments by society to agriculture. This largely involves environmental protection and nature conservation services, partial aspects of the vitality of rural areas in some regions of Europe, and some cultural services. For the purpose of maintaining production as a means of securing supply, including in emergency situations, agriculture must not be remunerated using public funds because this service can be better guaranteed through the use of other instruments (see Para. 24).

It must also be remembered that not all farms give rise to positive effects. In many regions, other economic sectors are more important than agriculture in preserving the vitality of rural areas, so that this argument cannot justify a one size fits all requirement. Particularly with regard to the environment, the provision of public goods in fully rationalised farming (farming structured along purely commercial lines) usually incurs opportunity costs and does not occur without additional incentives. Applying these incentives area-wide should, however, be a central task of future Common Agricultural Policy.

2.2 Establishing a remuneration system for public goods produced by agriculture

7. The Council proposes the introduction of three different types of payment: a basic payment for the provision of environmental services, agri-environmental measures which are designed to take account of additional environmental requirements in the Member States, and the promotion of nature conservation services which are not necessarily linked to agricultural activities through landscape management funding.

Basic payment for the provision of environmental services

8. The aim of the basic payment for the provision of environmental services is to secure the broad-based provision of minimum environmental protection and nature conservation services. To achieve this, payments must be easily administrable and payment applications must involve a relatively low level of effort for farmers. Not all farms will provide public goods, so not all farms will receive the basic payment for the provision of environmental services. Nonetheless, the measure is designed to foster participation by a sufficient number of

farms in all regions of the EU (including in high-yield regions). Thus, to achieve the greatest possible success with the allocated funding and to keep profit-taking to an absolute minimum, the payments must be based on the costs incurred by farms (including opportunity costs) and vary from region to region. The Council assumes that the rates of this basic payment will be considerably lower than those of current direct payments.

For services that could justify a right to a basic payment the Council proposes the following:

– Only farms that make 10 percent of their farmed land available as 'ecological compensation areas' on which they refrain from using ecologically negative farming practices should be considered as eligible for the basic payment. As shown by Oppermann (2009, p.10), this can be an important step in ensuring high levels of biodiversity in all regions of Germany (particularly in light of the additional pressures from climate change). To guarantee adaptation to regional conditions, the Council can imagine Member States drawing up a catalogue of potential 'ecological compensation areas' for their specific regions. The catalogue would include hedges, wild flower strips, field margins, flowering fields and flowering strips, or minimally fertilised meadows and pastures. Areas involving agri-environmental measures could also be classed as 'ecological compensation areas'. An additional requirement for payment of the basic payment involves compliance with minimum requirements which ensure conservation of areas in good agricultural and ecological condition. This includes preventing erosion, preserving organic substance in soil, protecting soil structures, maintenance of land no longer used for farming, maintenance of landscape components and the practice of three-crop rotation. Specific standards could, for example, focus on existing proposals to enhance agricultural policy (Oppermann 2009). These requirements must be complied with on the farm as a whole to secure an entitlement to the basic payment for the provision of environmental services per hectare of land. The land must be part of the agricultural area of the farmer. The obligation is not tradable.

– Based on the notion that conserving environmentally valuable permanent grassland usually gives rise to positive external effects, it can be assumed that for this permanent grassland an additional bonus would be paid on top of the regional basic payment rate. A similar approach could be argued with regard to organically farmed land.

Agri-environmental measures

9. Targeted measures, similar to those in today's agri-environmental programmes and many current contract nature conservation activities, supplement the basic services outlined earlier. Agri-environmental measures can also be combined with 'ecological compensation areas' to achieve differing environmental protection and nature conservation objectives. This is especially the case regarding effective protection of bogs, mires and fens, grasslands, river floodplains, and mountain and coastal regions. The priority aim is to implement the Habitats Directive and the Water Framework Directive. Agri-environmental measures should also be adapted to meet the targets of national biodiversity strategies. In particular, they must be further developed to take account of climate change.

Landscape management funding

10. Landscape conservation funding should be used for direct promotion of environmental protection and nature conservation. It should primarily be used for land that produces low yields in economic terms, to the extent that production is at risk of being abandoned altogether and such action would be seen as negative from a nature conservation standpoint. In addition, this funding should also be used whenever for nature conservation purposes a change in production is necessary which makes economically viable use of the land impossible. The instrument of landscape management funding stretches beyond the CAP because nature conservation objectives are at the forefront of land management. The production of agricultural products would only be a side-effect of land management and would only occur if it serves the nature conservation objectives and the desired preservation of the cultural landscape – as would be the case with certain extensive forms of grazing. A collision with WTO requirements is therefore not to be expected. This is important because in such cases the necessary payments per hectare could be higher than they are with current agri-environmental measures. Landscape conservation funding must enable both investment projects and contract landscape management agreements.

2.3 Financing the remuneration system

11. International agreements signed by the EU, such as the Biodiversity Convention and the Framework Convention on Climate Change, assign the EU co-responsibility for financing environmental protection and nature conservation in agriculture. The Council is thus against a renationalisation of financing for environmental protection and nature conservation services in agriculture.

A higher cofinancing share invariably means that the implementation of measures is dependent on the financial resources available to and the priorities set by the Member States. For this reason, the Council proposes that on the one hand, a basic payment for the provision of environmental services, including potential bonuses (Section 3.3.1), and on the other the future, higher amount of funding for agri-environmental measures (Section 3.3.2) and landscape management funding (Section 3.3.3) should be fully paid for by the EU if they

serve in meeting EU requirements. This would secure area-wide minimum requirements. Also, the measures prescribed by the EU regarding implementation of both the EU and national biodiversity strategies would be provided in agriculture and forestry by the Natura 2000 protected area network and by the necessary contributions in meeting the requirements of the Water Framework Directive and the Kyoto Protocol to mitigate climate change. All other measures which serve environmental protection and nature conservation should continue by means of cofinancing. It would, however, make sense to link the degree of cofinancing to the economic capacity of the respective Member States.

Further departures from cofinancing must be considered if a country has a disproportionate area of land which is of great nature conservation value to the EU because such land cannot be protected by means of minimum requirements. This makes sense for measures to preserve the cultural landscape because these goals cannot be achieved under regulatory law alone if the land is no longer used for production. The same applies to landscape preservation funding paid to promote climate change objectives – for example, special management of bogs, mires and fens.

2.4 Conclusion

12. The existing CAP must make the transition into an ecologically oriented agricultural policy. This means that a large share of the funding allocated to the agriculture budget so far should continue to benefit farming. However, distribution of this funding should no longer be largely income-focused, but must be closely linked to the provision of public goods. The Council is convinced that not all agricultural practices produce public goods per se, because especially in fully rationalised farming the production of public goods incurs costs (including opportunity costs). Only farms that bear these costs should be rewarded for doing so. Refocusing the allocation of funding is a prerequisite in ensuring that agriculture makes a more positive contribution to protecting nature and the environment. In their entirety, the measures must be structured in such a way as to ensure the current negative trends in agriculture – as seen from an environmental protection and nature conservation standpoint – can be stopped. Above all, it is necessary to guarantee the survival of less intensive practices with their positive effects on the environment and nature. This is particularly applicable in regions that can be described as low-yield regions and where the nature-compatible agricultural practices have been maintained which must be saved from disappearing.

It will not be possible to meet all the social requirements prescribed for agriculture using remunerations. It is thus important to secure compliance with existing environmental protection and nature conservation law (currently achieved with cross compliance provisions) using other ways and means. This calls for stricter enforcement of EU law and national legislation. Table 1 sets out the Council's proposal.

With a higher basic payment for grassland, the Council's proposals provide an additional source of income and opportunity for diversification, particularly in disadvantaged regions, whereby the farmer is not required to compete with producers who face very different competitive advantages and disadvantages. In regions threatened by land being left to fall fallow in the face of advancing liberalisation of agricultural policy, a system which rewards landscape preservation management provides a good and perhaps the only alternative source of income for farmers in future.

Table 1

German Advisory Council on the Environment proposal: towards a contemporary Common Agricultural Policy

– No payments without a provision of public goods
– Regulatory law decoupled from payments
– Area-wide minimum share of 'ecological compensation areas' secured by a basic payment for the provision of environmental services
– Significant increase in funding for agri-environmental measures/contract nature conservation
– Targeted payments for the conservation of environmentally valuable cultural landscapes

SRU/Statement No. 14 – 2009/Table 1

3 Rationale

3.1 Current agricultural practices have negative effects on the environment and nature in many regions

13. As a result of its intensification and industrialisation, agriculture, which over the centuries has served the conservation and even creation of new habitats for many species (Delcourt and Delcourt 1988, Wingender et al 2002), has become one of the main factors in the threat to biodiversity in Germany, in Europe and the rest of the world. Korsch and Westhus (2004) showed for Thuringia, for example, that if the landscape had always been intensively managed, plant species diversity would be significantly less than half of that which exists today. Specific problems still involve excessive nutrient inputs into sensitive terrestrial, aquatic and marine ecosystems and the associated change to the species spectrum and stocks. The rapidly increasing occurrence of the ploughing up of grassland, with its negative effects on water resources and on flora and fauna, and also the release of greenhouse gases pose a threat which is equally as serious as the growing claims on forest ecosystems. Finally, the small scale of protected areas and the poor ecological network in the intensively used nearly featureless landscapes of Europe also gives rise to fundamental problems (Kettunen et al 2007, Beck et al 2006, SRU 2008, Section 5, Millennium Ecosystem Assessment 2005).

Terrestrial ecosystems and species

14. Of the terrestrial habitats of European interest identified under the Habitats Directive, for which Special Areas of Conservation must be designated to ensure their conservation (Annex I – Natural Habitat Types of Community Interest), between 40 and 85 percent are in an unfavourable condition. This means that their size and quality are either on the decline or no longer meet the prescribed standards. Also, between 40 and 70 percent of the terrestrial and freshwater species listed in the Habitats Directive (Annex II, IV and V) are in an unfavourable condition (EEA 2009, European Commission 2009c). In a comparison of assessments of various land use forms, there is evidence that with only seven percent of assessments proving favourable, the conservation status of habitat types associated with agriculture is generally poorer than that of habitat types not associated with agriculture (21 percent, European Commission 2009c). The overall conservation status of grassland – largely influenced by traditional agricultural practices – is particularly poor and grassland habitats are gradually disappearing.

Further examples of a negative trend in agricultural land use include the general decline in plant diversity in correlation with nitrate levels in soil (Kleijn et al 2009) and the 44 percent drop in the populations of farmland birds over the past 25 years. In contrast, the drop in forest bird populations amounted to only 9 percent and that of populations of all common birds was only 14 percent (EBCC 2007, 2008). European butterfly populations, which are reliant on the availability of grassland, have dwindled by 60 percent since 1990 and there are no signs of this levelling out. The main causes are seen in intensification and the ploughing up of grassland (EEA 2009).

Increasing intensification of agriculture is the most frequently cited cause of threat to animal species in Germany (where 53 percent of land is used for farming) (Günther et al 2005, BfN 2008). In the most recent reporting period (2006), the sustainability indicator for species diversity (the ‘bird indicator’) achieves 70 percent of the target set for 2015; however, only 67 percent of the target was reached for the sub-indicator ‘birds associated with agriculture’ (Sudfeldt et al 2008). The loss of grassland, which in most cases is less economically viable than farmed land, is a threat to grassland bird species, be they meadow breeders or migratory birds. Just under a third of arable land in Germany is grassland. Over the past fifty years, in former West Germany alone more than three million hectares (approximately 21 percent of farmland) of natural (meaning non-sown) grassland was ploughed up and used for crop-growing. The percentage of ploughed up grassland was even higher in former East Germany (Brandt 2004). According to statistics published by the Federal Agency for Nature Conservation (BfN), about four percent of Germany’s permanent grassland (under EC Regulation No. 1782/2003) was lost during the period 2003 to 2008 (BfN 2009a).

Agrobiodiversity

15. On a global scale, the diversity of livestock animals and plants (part of the so-called agrobiodiversity) has declined by around 75 percent in the last hundred years. Thus, world food supply is now largely based on ten cultivated crop species. The vast majority remains underutilised. The situation is similar with regard to animal species. In recent times, almost 700 of the world’s 7,616 recognised livestock breeds have become extinct, nine percent of which in the last seven years. The FAO estimates that about a fifth of all livestock breeds are threatened and that genetic diversity within breeds and lines is on the decline. In Germany, for example, only five of at least 35 former domestic cattle breeds remain in existence (Deutscher Bundestag 2007).

The causes behind the loss of genetic resources in agriculture are largely economic in nature. In recent decades, animal breeding has primarily been focused on two goals: increasing livestock performance profiles and increasing their reproduction rates. Only in the past few

years have traits such as health, animal behaviour and product quality been added to breeding objective definitions along with pure performance enhancement. More agrobiodiversity can only be achieved through targeted promotion of the conservation of threatened populations by society and the state (IÖW et al 2004).

Freshwater ecosystems

16. Agriculture has a negative impact on waterbodies as well. Under the Water Framework Directive, all waterbodies in the EU should have achieved both good chemical and good ecological status by 2015. The Groundwater Directive prescribes that nitrate concentrations in all groundwater bodies should not exceed 50 mg/l by 2013. Diffuse nutrient inputs, mainly added to the soil in farming, are still one of the biggest pressures on EU water resources. Nitrogen surpluses are a key indicator in this regard – in the EU they vary significantly, from 37 kg N/ha in Italy to 226 kg N/ha in the Netherlands. Although nitrogen surpluses have declined in the EU-15 in recent years (European Commission 2007c) trends in the opposite direction can be observed in some countries. For example, nitrogen excesses in Spain and Ireland have risen by 47 and 22 percent respectively since 1990. In the new Member States (EU-10), nitrogen surpluses have increased by 17 percent since 1999 and further increases are expected. In Germany, agricultural land use is currently responsible for more than 61 percent of total nitrogen emissions in waterbodies and is the biggest source of verified nitrogen contamination (UBA 2008).

In respect of other substance inputs, discharge of phosphates from fertilisers especially from areas threatened by erosion are worthy of mention. Particularly in South European countries, heavy use of water in agriculture puts pressure on water resources and in many areas results in a drop in groundwater levels (Sonnenberg et al 2009). Draining, for example of fens and wet meadows (as is particularly intensively practiced in the Netherlands and Belgium), also has an impact on water quality, hydrology and the climate (Herbke et al 2006).

Marine ecosystems

17. Agriculture is even an important harmful influencing factor for oceans and seas. Surveys conducted under the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention) and the Baltic Sea area (HELCOM) clearly show that nutrient inputs from diffuse sources (especially nitrates) and thus primarily from agriculture remain a significant problem. This is particularly the case in the southern coastal waters of the North Sea (Skogen and Mathisen 2009) and in the entire Baltic Sea. Around 75 percent of nitrogen inputs and 95 percent of phosphorus inputs enter the Baltic Sea via rivers (OSPAR Commission 2008, HELCOM 2009). Of these, 58 percent of nitrogen and 49 percent of phosphorus inputs stem from diffuse sources, and thus primarily from farming and forestry (HELCOM 2007).

Climate change

18. Agriculture produces not insignificant quantities of nitrous oxide and methane emissions and thus contributes to climate change. In 2005, the global share of agriculture in overall anthropogenic greenhouse gas emissions was estimated at between 10 and 12 percent (Smith et al 2007). Agriculture in Germany makes up for some 128 million t CO_2-equivalent per year and thus for 13 percent of national greenhouse gas emissions (6 percent carbon dioxide, 48 percent methane and 80 percent nitrous oxide), of which 77 percent stem from ruminants (methane) and from crop-growing (carbon dioxide and nitrous oxide) (BMELV 2006). Also, land use and land use change releases considerable quantities of carbon dioxide. The transformation of forests into cropland or pasture, the ploughing up of grassland and the draining of fens is linked not only to the loss of surface biomass, but also to a reduction in humus. Both processes lead to considerable carbon losses.

Trend

19. If agriculture continues becoming increasingly market-focused and no environmental barriers are put in place, then existing trends can be expected to intensify. More rationalised farming, the loss of small-scale structures in trends towards larger fields and less frequent crop rotation, greater use of large tractors and harvesters, intensive use of fertilisers and pesticides, and expansion of industrial mass livestock management all go hand in hand with pressures on air quality, gradual contamination of the soil and groundwater, and further decline in agrobiodiversity.

The reasons for the loss of grassland, whose use is in many cases economically unviable, will continue to exist in the near future. This applies in particular to extensive or mesotroph grassland which is valuable to nature conservation (BfN 2009b). The intensification of grassland use, practices using frequent ploughing and the current increased ploughing up of grassland for crop-growing purposes lead on the one hand to the soil being turned from a carbon sink to a climate-damaging carbon source. On the other, the ploughing up of grassland involves the loss of many other functions such as protecting soil from erosion, groundwater protection, conservation of valuable habitats and recreational qualities.

The monotonisation of agriculture through land-use intensification results in a decline in retreats such as fringe structures and fallow fields, thus disrupting the regeneration and reproduction of species typical to open land. Negative effects manifest in disrupted reproduction

cycles in accompanying flora and fauna, a subsequent decline in populations and species, increased pressures from fertiliser and pesticide use, soil degradation and over-utilisation of water resources (Doyle et al 2007). Another important trend which will have a significant impact on the intensity of land use involves the demand for biomass for energy production (Holländer et al 2008).

These trends were certainly not harnessed by first pillar direct payments which were not coupled to nature conservation and environmental protection. Instead these trends were rather fostered by such payments (Boccaccio et al 2009). The payments for environmental protection in the current second pillar (rural development – EAFRD) were unable to reverse this trend due to their small share of the total agricultural budget. A radical refocusing of agricultural policy is thus needed.

The environment policy goals and requirements under Article 174 of the EC Treaty must in accordance with the cross-sectoral and integration clause of Article 6 of the EC Treaty also be included in agricultural policy, primarily to promote sustainable development. They must be made a more visible component of any and all agricultural policy measures. Hence, agricultural policy must be environment compatible (for an in-depth view see Calliess 1998). In accordance with Article 174 (2) of the EC Treaty, one of the goals of EU environment policy is to preserve and protect the environment and to improve its quality. Taking account of the differing conditions in the various regions of the EU, it aims to provide a high level of protection and applies the precautionary and polluter pays principles.

3.2 Payments to agriculture should reward services to society

20. Since the CAP reform of 2003, payments to agriculture were largely to compensate for the loss of price supports and were thus mainly designed to secure incomes. Further, in line with the EC Treaty, they were meant to stabilise the market, secure supply and ensure reasonable food prices (Article 33 (1) EC Treaty). As shown earlier, they have fostered rather than harnessed the negative impact of changes in agriculture on efforts to protect the environment and nature. The Council is convinced that payments by society to agriculture can only be justified in future if, by rewarding the provision of public goods, they counter the negative trends in nature conservation and environmental protection. Even if there are reasons for targeted income security policy in agriculture, these should be integrated into national taxation and social policy in line with the subsidiarity principle and not place a burden on the EU budget (Wissenschaftlicher Beirat Agrarpolitik beim Bundesministerium für Ernährung Landwirtschaft und Verbraucherschutz 2005).

Definition of public goods

21. The Council supports the many calls for ‘public money for public goods’ (Para. 2). By their very nature, public goods ensure that no-one may be excluded from access to them and that no rivalry exists regarding their use (see for example Cornes and Sandler 1999, Perman et al 2003, OECD 2001, p. 23). Both these traits can be found in things like flood protection dikes.

If there is no rivalry regarding their use, it means that the use of a public good by an additional user does not result in costs or disadvantages to existing users. In this way, price mechanisms should not be used to exclude people from using public goods.

The opportunity to place goods on the market is, however, dependent on the aspect of non-exclusion. If those who are not willing to pay for a good or service cannot be excluded from its use, then the good or service cannot be sold. This makes it impossible for the provider of the good or service to cover the costs of provision via the market. The positive effects arising from the good or service continue to be external for the provider. Such positive external effects are thus only produced if it is possible to do so without incurring additional costs. Thanks to certain traditional types of farming, a species-rich cultural landscape has been created more or less unintentionally. Hedges planted to prevent soil erosion by the wind have also provided habitats for many animals, while land which cannot be viably managed has been left to its own devices.

But as soon as the most economically viable production methods for private farmers no longer produce these non-excludable goods by chance, they will fail to be produced in the longer term if production is solely focused on the market. In this case, the state can and should represent its citizens as demander of these non-exclusive goods and reward the provision of positive external effects.

Public goods provided by agriculture

22. For some time now, a debate has been underway regarding which of these non-exclusive goods (goods not remunerated by the market) agriculture offers and whether at least some of them are produced per se in the use of land for agriculture.

This debate began with the WTO negotiations on the role of multifunctionality in agriculture. In 1998, the OECD ministers for agriculture agreed that agriculture may structure the landscape, performs services such as soil protection, sustainable management of renewable natural resources and protection of biodiversity, and contributes to the socio-economic vitality of many rural regions (OECD 2001, p. 5).

The effects described here can largely be seen as positive external effects from specific agricultural practices. For such effects, the costs should be reimbursed to the causer because they would not be provided in the absence of

such payment (Gießhübel-Kreusch 1989, Berg et al 1993, Hanley et al 1998). In the strictest sense, it is only possible to speak of one (absolute) positive external effect from agriculture which should definitely be rewarded if this effect would not occur without agriculture and must then be produced separately (OECD 2001, p. 16 ff).

In many cases, however, the decision is made to reward positive effects on a relative basis, for example if a farm reduces its nitrate emissions significantly below the legally allowed level. In line with the provisions of regulatory law, the owner has the right to use his property free of charge. If the state wants to achieve reductions which go beyond those prescribed by regulation, it must reimburse or in some cases compensate the causer for maintaining higher standards.

23. In connection with the debate on a change to payments under the CAP, the question has arisen as to whether there are positive effects produced by agriculture per se and if so whether this would allow unconditional subsidisation of farms. In this regard, supply security and vitality of rural areas are also cited along with positive effects on the landscape (Para. 2 and the positions outlined therein). The extent to which this really involves positive external effects from agriculture is addressed in the following.

When it comes to the environment and nature, the most important public goods produced by agriculture can be seen as goods and services in the form of biological diversity, particularly ecosystems (environmental services) (SCBD 2007, see LUPG 2009). The regulating and cultural services of biodiversity could be promoted using appropriate agricultural practices. Among the regulating ecosystem services are plant pollination, climate regulation, regulation of pests and of disease, protection against natural threats and preventing soil erosion. The cultural services include spiritual and religious values, education and inspiration, recreation and aesthetic values. The supporting ecosystem services comprise, for example, the conservation of soil fertility and soil's production capacity. These are also valuable in that they make it easier to react to food crises, thus increasing the likelihood of securing the availability of basic supplies for the population. The Council's proposal to restructure the CAP can under certain circumstances serve supply security to a greater extent than unlimited production, which can have long-term negative effects on soil fertility.

These ecosystem services have a not insignificant yet often non-quantified value (BMU 2008, Sukhdev 2008). Their conservation in efforts to secure food supply would no doubt be considerably more cost-effective than any after-the-fact clean up operations (Baumgärtner and Becker 2008). Services in this sector should thus be rewarded. As shown in Section 3.1, currently dominant agricultural practices tend to work against rather than in favour of biodiversity conservation, so that these positive external effects from certain agricultural practices provide no legitimisation for the provision of funding to promote agricultural production per se.

Relative positive external effects could occur in all areas of environmental protection and nature conservation where regulatory law applies and, for example, further emission reductions are desired for reasons of groundwater protection. The reward of these services is then necessary, but by definition can not be seen as a reason for unconditional promotion of agriculture.

24. It can be assumed that the population is averse to risk when it comes to the possibility of their supply of basic foodstuffs being threatened. In respect of *supply security*, therefore, state intervention can be justified to protect society against possible food shortages. In the first instance, this occurs not only in the production of agricultural goods per se, but also in areas such as storage of basic foodstuffs and distribution measures for that purpose. Targeted measures for the most vulnerable population groups are a far more effective instrument than blanket promotion of agricultural production. Promotion of farming per se can mean that a large share of production is spent on the mobility of the richer sections of the world's population, while poorer groups go hungry. As outlined earlier, maintaining soil fertility and long-term production capacity to ensure supply security is better than some agricultural practices which focus purely on short-term profit maximisation.

Preserving the *vitality of rural areas* is also seen as a non-exclusive good. This is based on the assumption that in contrast to the vitality of urban areas, the vitality of rural regions is threatened. The reason is largely due to the fact that decisions to invest in a certain location, made either by companies or private individuals, give rise to external effects which are caused by the specific characteristics of the local infrastructure. Infrastructures such as roads, schools, wastewater disposal systems and so on are known as collective goods. If these are not fully utilised, the costs to users rise with each additional non-user. It thus becomes increasingly more expensive to maintain the necessary infrastructure. If it is scaled down (fewer schools and hospitals, for example), its use becomes less attractive and outward migration is fostered. This negative external effect of outward migration is considered neither in budgets nor in the decision-making processes of business.

Also, in many conurbations the existing infrastructure becomes overloaded – an effect which goes unaddressed in location-specific business investment decisions. This highlights a clear failure by the market and so justifies state intervention to secure the attractiveness of and economic opportunities in rural regions. But while agriculture is the only such opportunity in some regions, this does not necessarily apply across the board and must be decided in accordance with prevailing regional

conditions. Measures to preserve the vitality of rural regions should be accessible to farmers, but they should also take in non-agricultural sectors.

Maintaining *cultural heritage* is another non-marketable good which is discussed in relation to agriculture. This involves a public good which possesses exceptionally strong traits of non-exclusivity and non-rivalry. It is also a characteristic of many landscape elements, such as raised hedges and stone walls, that they are necessary on farmland. Traditional farms also have their value – and not just in open-air museums. Where there is a social need for these goods, certain traditional agricultural practices deserve to be supported.

Conclusion

25. In sum, it is evident that agricultural practices can give rise to positive external effects which would not be produced in the longer term or would not be produced in sufficient quantities in purely market-focused farming. This is especially the case with regard to environmental protection and nature conservation services, partial aspects of the vitality of rural areas in certain regions and some cultural services. For the purpose of maintaining production as a means of supply security, including in times of emergency, agriculture should not be remunerated using public funds because such services are better secured by means of other instruments. Also, it must be remembered that not all farms cause positive effects. In maintaining the vitality of rural regions, other economic sectors are now more important than agriculture in many areas, so that this does not stand up as an argument for blanket subsidies. For fully rationalised farming, environmental protection and nature conservation services and the provision of a diverse cultural landscape usually involve opportunity costs and thus do not occur without additional incentives. Particularly where environmental protection and nature conservation are concerned, these incentives must be provided area-wide but should nonetheless be a key task of any future CAP.

There are some calls for a basic subsidy for all agricultural production, with the justification that farmers in the EU must meet a range of obligations that many of their competitors are not expected to fulfil. The Council is convinced that compensation for domestic agriculture can only be justified if production in the EU involves relatively fewer negative effects in respect of *global* environmental goods and services when compared with production in other locations. Regulation of local environment and nature protection effects is the result of specific conditions in the EU which dictate the level of competitiveness in differing locations. It thus provides no justification for market intervention.

Some recent studies (Hirschfeld 2006, Grote et al 2002) show, at least for Germany, that the additional costs incurred due to environmental regulations are marginal although the vast majority of additional costs are not caused by measures to combat global environment problems. Hence, this argument does not justify the provision of financial assistance to agriculture per se.

Overall, the Council is convinced that a new CAP must give priority to the conservation and protection of biodiversity, because this public good is becoming an ever scarcer resource (Section 3.1) and, compared with all other sectors, agriculture has the greatest influence on its availability.

3.3 Remuneration of positive external effects from agriculture is served by a combination of three instruments

26. Sustainable agriculture builds on the existing Community and national laws which apply to its land and activities. These must remain in place as mandatory obligations irrespective of whether or not farmers receive public subsidies (SRU 2008, Section 11.3). Additionally, to achieve effective environmental protection and nature conservation, there is a need for area-wide measures and targeted agri-environmental activities, and farmers must be prevented from giving up ecologically valuable agricultural practices (Section 2), as outlined in the following.

Funding of environmental services must be secured by redirecting funding from the EU agricultural budget, with a large portion of that funding continuing to be paid directly to farmers but with new distribution effects: those who offer the most public goods will benefit most from the new system.

As a guiding principle for the use of public funds to reduce negative external effects beyond legal requirements and to foster positive external effects, the Council sees an urgent need for the following measures:

– Fulfilling minimum requirements of environmental protection and nature conservation, including in intensively farmed high-yield areas.

– Maintaining extensive agricultural production with its positive effects on biodiversity and on abiotic resources.

– Maintaining specific agricultural practices on land which is deemed valuable to nature conservation because of these practices and is threatened by the withdrawal of such uses.

3.3.1 Area-wide environmental protection in agriculture: a basic payment for the provision of environmental services

27. As the biggest user of land, farming along with forestry plays a key role in preserving biodiversity. The increasing intensification of agriculture (Section 3.1) has resulted in the need for area-wide standards for

environmental protection and nature conservation which take priority over Community and national law and should be rewarded with a *basic payment for the provision of environmental services.* The organisational basis is provided by the Integrated Administration and Control System (IACS), which is a set of regulations introduced by the European Commission to implement and enforce common agricultural policy in the EU Member States. The Council assumes that the rates of this basic payment will be considerably lower than those of current direct payments.

There is evidence that 'ecological oases' in heavily farmed regions play an important role in biodiversity conservation (Merckx et al 2009, Rodriguez and Wiegand 2009), which is why a percentage of land as 'ecological compensation areas' (Oppermann 2009, p. 10) is a prerequisite for the basic payment for the provision of environmental services. This means land on which environmentally negative management practices are abandoned, but where environmentally sound agriculture is nonetheless possible. The existing cross compliance rules to secure good agricultural and environmental status of arable land have in themselves not been enough to preserve biodiversity on such land. It has been determined that although the minimum management obligations are sufficient to maintain an open landscape, the biodiversity of the flora and fauna studied is on the decline (Oppermann 2009, p. 5).

A portion of the 10 percent 'ecological compensation area' would for example in future be seen as an environmental substitute for the discontinued mandatory set-aside at EU level and could improve the situation for species associated with agricultural landscapes (Schümann et al 2009, Güthler and Orlich 2009, Oppermann et al 2008, Sudfeldt et al 2008, Smith et al 2008). If, between different fields, there are not only highly productive areas but also a regular occurrence of areas with poorer soil quality and technologically less well tended land, these could be integrated into a 'stepping stone' system (Berger et al 2004).

For 'ecological compensation areas', it is important that in terms of their structure, they be designated according to regional conditions. Examples include hedges, flowering fallow land, species-rich meadows and pastures, and production-integrated low-production sandy areas, mud holes, wet areas and kettle holes. Land used for agri-environmental measures could also be included in this catalogue. With broad take-up of the basic payment and thus the provision of 'stepping stones' the permeability of landscapes for population exchange and species migration is increased. This is of particular importance given the feared impacts of climate change.

Impacts on biodiversity were studied in model scenarios using the skylark (*Alauda arvensis*) as an example. The exclusive planting of typical energy crops can lead to the disappearance of the skylark from the landscape. This trend can be mitigated by planting suitable, particularly linear-shaped field fringes and can thus maintain the population size at a survivability level (Schümann et al 2009, Fuchs and Steinbachinger 2008). There is also evidence that the efficiency of agricultural machinery cannot be significantly increased beyond a field size of one to two hectares. By contrast, the dwindling structural diversity that comes with larger field sizes has a negative effect on biodiversity (Baessler and Klotz 2006). Keeping border strips and sowing linear strips in fields upwards of two hectares therefore reduces biodiversity loss without significantly impeding the efficient use of agricultural machinery (Rogriguez and Wiegand 2009).

28. Another prerequisite for payment of the basic payment for the provision of environmental services is the maintenance of good agricultural and environmental status of the land. Requirements should secure the prevention of erosion, the conservation of organic substance in soil, protection of the soil structure, restoration of land no longer used for agriculture, the conservation of landscape components and the retention of three-way crop rotation. Specific standards could, for example, borrow from existing proposals to enhance agricultural policy (Oppermann 2009). These requirements must be complied with on the farm as a whole to secure entitlement to a basic payment per hectare of land. The land must be part of the agricultural area of the farmer. The obligation is not tradable.

29. To ensure broad take-up of the basic payment, it must be made attractive enough for most farms in all regions. This means that the amount paid must at least be sufficient to cover the costs generally incurred by farms in a given region. To reduce the expenditure involved with this instrument and to keep unjustified profit-taking effects to a minimum, the amount of the payment must be scaled according to region. This allows the use of a given budget to attain a maximum in target achievement and, if a relatively high basic payment is aimed at maintaining minimum standards in high-yield regions (with high opportunity costs), to prevent low-yield regions (with low opportunity costs) receiving significant amounts in over-compensation.

30. A *higher basic payment* should be paid as an additional bonus for the conservation of permanent ecologically valuable grassland (baseline 2003, start of the ploughing-up ban under cross compliance) and for organic farming. The conservation of permanent grassland protects the species dependent on it (e.g. birds, butterflies and plants). At the same time, grassland grown on organic soil prevents the release of some of the carbon stored in the soil (Freibauer et al 2009, Wegener et al 2006). Further agri-environmental measures, such as pasture payments and extensification bonuses, can specifically target grassland.

Organic farming is based on the notion of a closed-cycle agricultural system which is characterised by the greatest

possible avoidance of the use of chemical and synthetic substances like fertilisers and pesticides and limits the number of livestock per hectare (non-intensive livestock farming). Organic farming is not automatically 'nature conservation compliant' (van Elsen 2005). Nonetheless, compared with conventional farming, diffuse pollutant and nutrient inputs are lower and the number of species present is usually higher across the farm as a whole (Bengtsson et al 2005, Hötker et al 2004). For this reason, organic farms should receive a higher basic payment. Positive effects on the environment are especially fostered by subsidisation of organic farming when it is combined with other measures and targets (agri-environmental measures, Section 3.3.2). In Europe, around five percent of arable land is farmed organically and more so in countries with comparatively smaller-scale landscapes, such as Austria and Switzerland (European Commission 2009a).

31. With the minimum requirements linked to a basic payment for the provision of environmental services, as opposed to the current cross compliance systems, the existing practice of numerous detailed bans which are difficult to monitor and control will be abandoned in favour of a small number of binding requirements which govern the receipt of public funds. This will serve to make the payment more attractive and thus encourage broad take-up by farmers.

3.3.2 Targeted environmental protection: agri-environmental measures

32. To reward the services needed to implement the requirements of EU and national nature conservation law and to comply with international agreements such as the Convention on Biological Diversity and the Framework Convention on Climate Change, the funding allocated for *agri-environmental measures* must be significantly increased. To achieve the prescribed objectives, studies estimate a total funding requirement of about 20 percent of the agricultural budget (Güthler und Orlich 2009, Güthler and Oppermann 2005, p. 126-131, von Ruschkowski and von Haaren 2008). For Germany, this would mean doubling its funding allocation (von Ruschkowski and von Haaren 2008). The estimated funding amount is based on an assessment of the number of acres of open landscape locations in Germany and the funding needed to achieve the EU target of halting biodiversity loss by 2010 (Gothenburg Summit 2001). For example, under-utilised pasture could for reasons of species and habitat conservation be managed as extensive pasture to halt natural succession (Vögtlin et al 2009, Lubw 2007, von Oheimb et al 2004). A clear allocation and increase of funding earmarked for Natura 2000 and Water Framework Directive activities is needed to promote both compensatory payments and contract nature conservation on such land (Boccaccio et al 2009). The European Economic and Social Committee (EESE) has spoken in favour of a separate budget heading (EESE 2009). The European Commission itself says that one of the main problems in implementing Natura 2000 is that only a limited amount of funding is available with which to ensure effective regional management and provide support measures (European Commission 2006, p. 8).

Also, the ecological network needed to link the various habitat types in the Natura 2000 system should be cofinanced by agri-environmental measures which, apart from securing suitable core areas, by means of migration and colonisation corridors also enables species to shift their geographical range (Article 3 (10) of the Habitats Directive, Article 3 of the Birds Directive, Water Framework Directive) (Hole et al 2009, VOS et al 2008).

Measures to stabilise climate-sensitive ecosystem functions and to establish a multifunctional ecological network should support adaptation responses in nature and the landscape and halt undesired changes to the extent possible (SRU 2008, Para. 367, Vohland et al 2009). For example, near-natural water resources are needed to reduce the emission of climate-damaging gases and for flood protection. This includes reactivating wet and moist areas together with the targeted creation of floodplains alongside rivers (Freibauer et al 2009, Dister and Henrichfreise 2009). The transformation of cropland into grassland in suitable locations within Natura 2000 areas, nature conservation areas and episodically flooded river meadows and fen buffer zones (a measure provided in North Rhine-Westphalia) has a stabilising effect on the climate and on ecosystems (Thomas et al 2009).

3.3.3 Preserving cultural landscapes: landscape conservation funding

33. Apart from promoting farming that concentrates on the production of agricultural products, targeted promotion is necessary to ensure the maintenance of particularly valuable cultural landscapes which would disappear without such support. Cultural landscapes play a significant role in people's quality of life, in regional identity and value, and in preserving biodiversity (Claßen et al 2005). If the direct payments provided under the existing CAP are withdrawn and liberalisation of the EU agricultural market continues, then agricultural production could be at risk in some regions of the EU. A subset of the Common Agricultural Policy Regionalised Impact (CAPRI) liberalisation scenario, which involves the withdrawal of direct payments along with all other internal support measures and all import customs taxes, estimates that 86 percent of available arable land would remain in use. Some arable land, particularly in South-West Europe, would fall fallow. But the CAPRI scenarios also show that even in the reference scenario, which depicts a probable outcome from the WTO negotiations, land will fall fallow (Nowicki et al 2006, Section 3.4). This applies largely to regions deemed particularly valuable to nature conservation.

With the proposed instrument for *landscape conservation funding*, conservation of environmentally valuable cultural landscapes is to be achieved if these are at risk of falling fallow. In providing these public goods and services, the first port of call are the farmers who employ traditional farming practices, although the measures should also be open to others who aim to specialise in landscape management. An interesting way of implementing this idea can be seen for example in the Netherlands and in Great Britain, where ecologically sensitive areas at risk of falling fallow are acquired by the state and then put out to tender under contract nature conservation agreements in order to keep costs as low as possible, or where management of such areas is assigned to non-profit foundations (Opdam et al 2002, Henle et al 2008).

Ecosystems of particular uniqueness and biodiversity for which the use of landscape management funding may be considered arise most often from extensive livestock management (von Oheimb et al 2004, Gerken et al 2008, Vögtlin et al 2009) and from traditional agri-forestry systems (Luick and Vonhoff 2009). These types of land use comprise numerous habitats listed in Annex I to the Habitats Directive, ranging from mowed meadows to forest pastures and heaths whose conservation requires ongoing extensive pasturing or a late mowing. Landscape conservation funding must enable both investment measures and contract nature conservation.

3.4 Proposals in line with WTO requirements

34. With regard to agricultural policy, the WTO rules are gaining in importance. Since the Uruguay Round, the agricultural sector has been integrated into the WTO framework under the Agreement on Agriculture. This Statement largely focuses on internal support mechanisms. The WTO Agreement on Agriculture requires that internal support mechanisms (Part IV of the Agreement) be limited or reduced if they influence what is produced and the quantities in which products are produced. Thus, the internal support mechanisms have been categorised in boxes in accordance with their various effects. Different rules apply to different agriculture promotion measures. In particular, state-guaranteed prices and direct payments linked to production volume must be reduced (Article 6 of the Agreement on Agriculture, known as the Amber Box). While such internal support mechanisms are not yet banned, their use is subject to binding maximum levels.

Not yet governed by the reduction targets are direct payments that fall under *production limitation programmes* (Section 6 (5) of the Agreement on Agriculture) if additional conditions are met. These provisions are described as Blue Box criteria and have met with increasing criticism since the start of the current round of talks (the Doha Round) (Swinbank 2008, p. 447). Only a few countries – mainly the EU – make use of this type of subsidy (Reichert 2005, p. 15, 19).

The final category, the Green Box, encompasses measures which are excluded from reduction targets (Annex 2 of the Agreement on Agriculture) because it is assumed that they have little or no effect on trade and production. They must be financed using public funding and may not work as a price support mechanism to the benefit of producers. Also, Annex 2 sets out detailed requirements for the different types of programmes. These include requirements for programmes from which farmers receive direct payments and for programmes which provide no direct payments.

If farmers receive direct *financial* support, the Green Box contains especially stringent requirements which are designed to prevent payments having a distorting effect on trade:

– The amount of such payments 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.

– The amount of such payments in any given year shall not be related to, or based on, the prices, domestic or international, applying to any production undertaken in any year after the base period.

– No production shall be required in order to receive such payments.

For payments made under environmental programmes, the most important criterion is that the amount of financial support be limited to the additional costs or to the amount of income lost through participation in the programme (Annex 2, Item 12 of the Agreement on Agriculture). Some interpret this such that existing EU agri-environmental programmes do not fully meet the requirements of the Agreement on Agriculture (Reichert 2005, p. 15). Separate requirements exist for income safety-net, structural adjustment (set-asides) and regional assistance programmes (Annex 2, Item 17, 10 and 13 of the Agreement on Agriculture).

The new approach to the CAP beyond 2013 must also be discussed against the backdrop of the expected further developments in negotiations on the WTO Agreement on Agriculture. It is as yet unclear whether the Doha Round can be brought to a conclusion. If a new agreement is reached, countries with a large number of trade-distorting support mechanisms (like the EU) will have to reduce these considerably compared with countries that make only marginal payments. The Green Box criteria should also be reviewed. Green Box eligibility of direct payments is already under review (Swinbank 2005, p. 10). If the Doha Round fails, it is uncertain whether the WTO's influence will weaken in future because it is expected that the EU's trade partners will apply WTO arbitration mechanisms to enforce changes to the CAP

(Swinbank 2008, p. 449, Schnepf and Womach 2007, p. 13).

35. In sum, the WTO rules allow the following requirements to be derived in respect of a reform of the CAP:

- Trade-distorting measures must be greatly reduced, particularly in countries with a large number of such payments.
- Fluctuations in global market prices should not be absorbed by the state.
  - This applies especially to subsidies which cause an increase in production.
  - Payments which reduce production will also be capped in future.
- Subsidies to promote other purposes, such as environmental protection and nature conservation, must be limited to the additional costs incurred by farms and should not contain production-related requirements.

The system proposed by the Council for future promotion of environmental services in agriculture corresponds with the requirements contained in the WTO Agreement on Agriculture and attempts to anticipate the outcome of the Doha Round negotiations. The proposed basic payment for the provision of environmental services and the agri-environmental measures reward farmers' decisions to comply with specific environmental requirements. The payments should not distort trade or should only do so to an absolute minimum (Annex 2, Item 1) and would be financed using public funding (Annex 2, Item 1a). Also, they should have no price support effect to the benefit of producers (Annex 2, Item 1b). The specific requirements prescribed for environmental programmes (Annex 2, Item 12) have also been taken into account.

The landscape conservation funding proposed by the Council would not fall under the Agreement on Agriculture. The Council sees subsidised management forms not as agricultural production, but as targeted promotion of Member States' cultural heritage. It is thus convinced that they need not be assessed in accordance with Green Box criteria and may also contain requirements concerning the use of the affected land.

3.5 Financial measures must be supported by stricter enforcement of regulatory law

36. Under the current rules, farmers receive first pillar direct payments in the full amount only if they meet other requirements (cross compliance, Regulation No. 1782/2003) which among other things are designed to guarantee compliance with environmental and animal protection law and ensure a secure food supply. This requires a command and control instrument which improves what has to date been unsatisfactory compliance with EU agricultural policy. If, as called for in this Statement, no performance-related direct payments are made in future, then the associated cross compliance obligations would also fall away. In the debate on the future of direct payments, the role of cross compliance in enforcing regulatory law in agriculture is sometimes used as an argument in favour of maintaining the status quo. The Council rejects this argument on two grounds:

Firstly, it is questionable whether cross compliance actually improves compliance with regulatory law to any significant extent (Nitsch and Osterburg 2007, p. 41). Doubts about the eco-efficiency of cross compliance arise not only on account of the low monitoring and control rates (only one percent of farmers per standard are monitored in a given year), but also because the monitoring criteria tend to be based more on verifiability than on eco-efficiency.

Even in cases where cross compliance does have a positive effect on compliance with regulatory requirements, these can in no way legitimise or justify a continuation of income support payments. Stricter enforcement of regulatory law must be achieved by other means. This calls for a range of different measures. Above all, the enforcement of environmental, animal protection and health law using EU and national measures must be structured so that they either replace the monitoring and control activities or, better still, enhance and expand them. Ideally, monitoring and control would be coupled and coordinated with an advisory system, with attention being paid to the criticism expressed by Nitsch and Osterburg (2007) on the enforcement of cross compliance. This means that the enforcement system should be fair and equitable – in other words it should be adequate and reasonable, contain targeted controls and proportionate sanctions, and be tailored to individual holdings.

On this issue, the EU can only lay down limited rules because the competency to enforce the applicable regulations lies with the Member States. It could be possible, however, that such enforcement is reinforced by the 'soft' instruments arising from the efficiency requirement contained in Article 10 of the EC Treaty. The two instruments typically used in agriculture to enforce environmental law (subsidies and statutory regulations spread across varying pieces of legislation) could be further enhanced using a broad mix of instruments (Gunningham and Grabosky 2004, p. 282). The range of as yet inadequately utilised instruments stretches from information and advice, to self-prescribed targets, economic instruments (one example being the pesticide tax or charge proposed by SRU) and the withdrawal of false incentives (Gunningham and Grabosky 2004).

The Member States could, for example, be required to report at regular intervals on effective implementation of

the respective regulations. Such reporting requirements would mean that the Member States are forced to structure their own enforcement measures so as to make such reporting possible. Also, in a similar way to the approach taken by the IMPEL (Implementation and Enforcement of Environmental Law) Network, agricultural working groups could be formed between the Member State authorities responsible for enforcement in order to harmonise and enhance enforcement measures. Finally, farmers could be better reached if attempts were made to support the implementation of the respective law by means of advisory services. This approach, which is already practiced with success in some German states, also ensures that the environmental requirements are enforced with farmers' cooperation and not by taking action against them. EU funding could be made available for this purpose.

3.6 Strategy creates new income opportunities, including for small farmers

37. All experts agree that in future, price volatility will intensify greatly in the key agricultural markets (see, for example, Schumacher 2008). At the same time, calculations drawn up by Hofer (2009) show that in a market solely focused on production, many EU producers tend to incur higher production costs and are thus competitively disadvantaged when compared with those in other key agricultural production countries.

Against this backdrop, this trend must be seen in the context of the fact that in recent years, an increasing number of farmers have had to give in to the pressures of structural change and cease production. In particular, due to their less-favourable locations (e.g. hillside situations) farms in disadvantaged regions – often dairy farms – are unable to compete with those in better areas and thus face a serious risk of losing their livelihoods. And given the pending abolition of milk quotas, dairy cattle farms will be especially hit by structural change. Compared with pig and poultry farming, structural change in milk production has been slowed down by the milk quota (BMELV 2009b). This leads to the assumption, however, that without additional intervention before milk quotas are withdrawn (expected in 2015), structural change in dairy cattle farming will be even more dramatic than in other production and processing sectors.

But on dairy farms in low-yield locations, income diversification by means of producing different marketable goods (which constitutes a risk minimisation strategy) often proves impossible. The fact that these farms in particular often produce a broad range of public goods does not help them improve their position on the market.

38. With the higher basic payment for ecologically valuable grassland, the Council's proposals provide an ideal opportunity for dairy farmers to make use of an additional source of income. Particularly for farms in disadvantaged regions, rewarding the provision of public goods offers an alternative means of income and an opportunity to diversify where the farmer does not need to compete with producers who experience very different competitive advantages and disadvantages. In regions threatened by land falling fallow in the wake of ongoing liberalisation of agricultural policy, a system which remunerates landscape management provides farmers with a good and perhaps the only alternative source of income for the future.

Also, this income can act as a risk buffer for all participating farmers: public goods do not loose their value when market prices plummet, so that income from the 'production' of public goods remains secure as long as those goods are produced in the quality demanded.

Apart from the clear economic advantages of the Council's remuneration system, there is another important factor to consider: the overall model presented in this Statement creates specific demand for environmental protection and nature conservation as products in their own right. They thus become a kind of marketable good, internalising the external positive effects of agriculture. By demanding a product in the form of nature conservation and environmental protection, the state communicates to farmers that it values and rewards their conscious decision to produce those goods. Farmers are then seen not as 'subsidy recipients', but as producers – which is how farmers traditionally see themselves (see Gujer 2006, p. 36).

Abbreviations

BfN	Bundesamt für Naturschutz (Federal Agency for Nature Conservation)
Birds Directive	Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds
CAP	Common Agricultural Policy
CAPRI	Common Agricultural Policy Regionalised Impact Modelling System: An instrument for the evaluation of ex ante impacts of the Common Agricultural Policy and trade policies, with primary focus on the EU
EAFRD	Regulation (EC) No. 1698/2005 of the Council dated 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)
EC Treaty	Treaty Establishing the European Community
EESC	European Economic and Social Committee
EU	European Union
FAO	Food and Agriculture Organization
GMO	Genetically modified organism
GNI	Gross National Income
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
HELCOM	Helsinki Commission – Baltic Marine Environment Protection Commission. The Convention on the Protection of the Marine Environment of the Baltic Sea Area of 1992
IACS	Integrated Administration and Control System
IMPEL Network	Implementation and Enforcement of Environmental Law: Implementation and enforcement of environmental law, European network in which all EU Member States, Norway and EU accession states are represented
LIFE	L'Instrument Financier pour l'Environnement, the EU's financial instrument for supporting environmental and nature conservation projects
N	Nitrogen
OECD	Organisation for Economic Co-operation and Development
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
SRU	Sachverständigenrat für Umweltfragen (German Advisory Council on the Environment)
Water Framework Directive (WFD)	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
WTO	World Trade Organisation

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This statement is available online.

ISSN 1612-2968