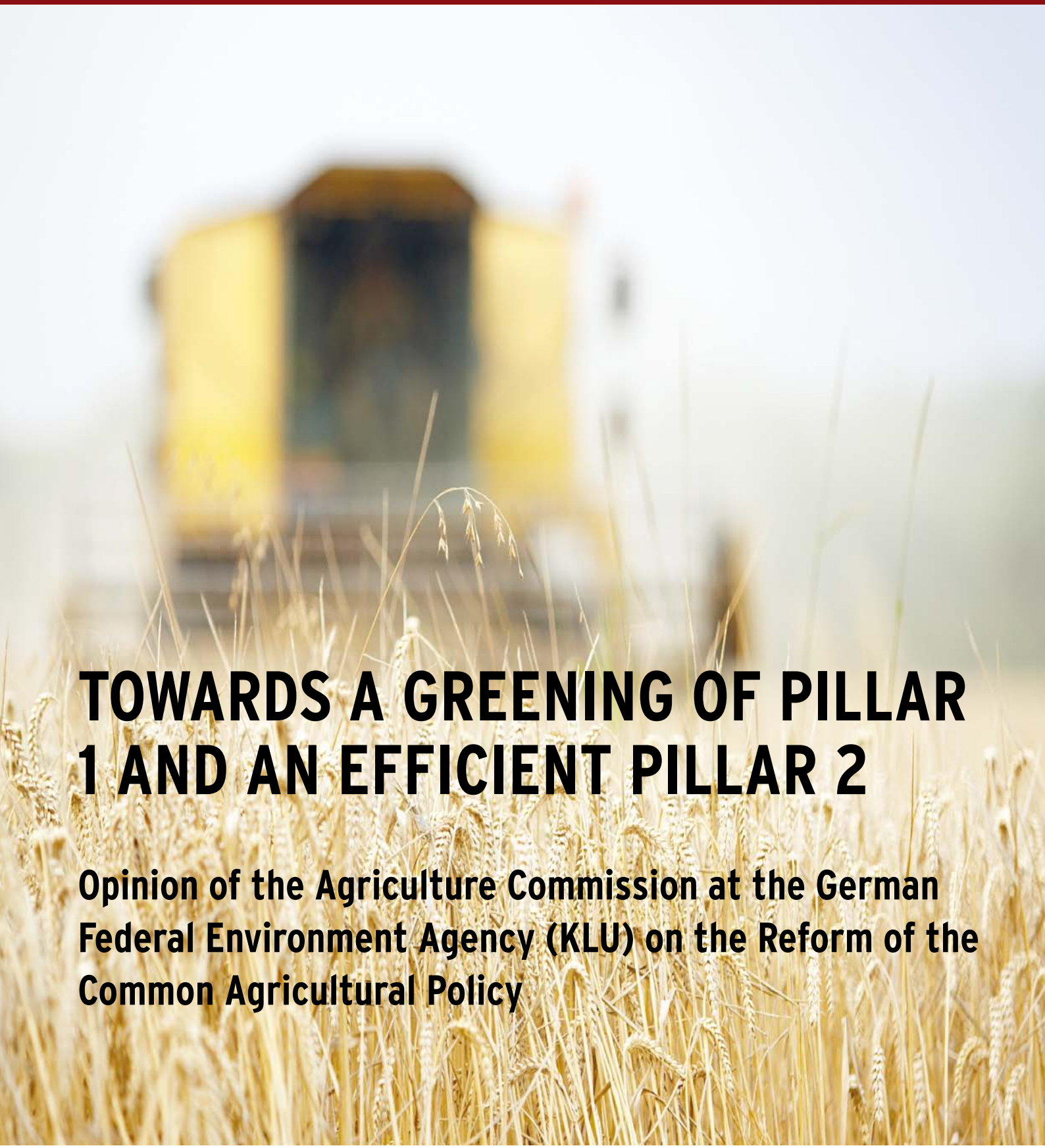

TOWARDS A GREENING OF PILLAR 1 AND AN EFFICIENT PILLAR 2

Opinion of the Agriculture Commission at the German Federal Environment Agency (KLU) on the Reform of the Common Agricultural Policy

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Opinion

July 2011

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Summary

The EU Common Agricultural Policy (CAP) intends to enable farmers to engage in multifunctional production by providing incentives or compensating farmers for measures and public goods not sufficiently remunerated by the markets but for which there is a societal demand. The CAP thus provides an important foundation for supporting the agricultural sector in meeting the European environmental and sustainability objectives by 2020[1].

The CAP is currently facing another reform process which intends to establish the framework conditions for the 2014-2020 period. A Communication from the EU Commission of November 2010 outlines three basic options to this end (continue on current course – "greening" – radical restructuring). In this Opinion Paper, the Agriculture Commission at the Federal Environment Agency (KLU) sets out its position based on the question as to how environmental protection in the agricultural landscape can be effectively enhanced in the context of current political discussion and under the premise that the two pillar approach will be maintained.

Public financial support for the farming sector needs broad societal acceptance, especially in times of constrained budgets. The current CAP does not meet this requirement. Therefore, the KLU calls for the future provision of public funds to be made exclusively conditional on the delivery of public goods and services.

To achieve this aim within a politically realistic framework requires that a strong and mandatory "greening" component be introduced in Pillar 1 (direct payments). As measures within this "greening" component the KLU proposes a limit on nitrogen net balance surpluses, a limit on stocking rates, the preservation of permanent pasture, a limit on the maximum proportion of any one crop type on arable lands, and the provision of ecological focus areas. Additionally, low-input semi-natural grassland (*Calluna* heaths, juniper heaths, alpine pastures) must be integrated into the Pillar 1 support system.

Future Pillar 2 funds (rural development, incl. agri-environmental measures) must be used in a more targeted and efficient manner with a view to the provision of public goods and services. Moreover, they should primarily consider specific regional characteristics in terms of physiography and agricultural structures.

At an appropriate stage the pending CAP reform will need to be the subject of a performance review (midterm review). For this evaluation, the KLU proposes six environmental and sustainability objectives that are descriptive of environmental framework conditions to be achieved by the European farming sector by 2020.

1 Agriculture and the environment – the role of European agricultural policy

Agricultural work is undertaken in nature and with nature. Farmers therefore have a major responsibility for the protection of soils, water, air, and species diversity as well as for natural systems overall. Despite much indisputable progress, the agricultural sector does not yet adequately live up to this responsibility. There is still a significant gap between the societal demands on agriculture in terms of environmental protection and nature conservation, preservation of cultural landscapes etc. and the daily reality. Farming today is a major cause of the eutrophication and acidification of natural ecosystems, climate change, and the loss of biodiversity.

However, farming in the EU is also affected by changing conditions: by increasing incidents of extreme weather events as a result of climate change, by downward pressure on prices bearing on the sector, and by global competitors who in some instances are subject to lower environmental production standards. The sector must undertake efforts to reduce its adverse environmental impacts while at the same time it is asked to – and indeed it must – adapt to global change.

European farming thus faces an enormous challenge: It is intended to, and must, safeguard the security of supplies in Europe into the future, produce food and increasingly also energy while causing fewer environmental impacts and facing increasing price insecurity as well as restrictions resulting from extreme events and complex interactions of environmental damage, climate change and loss of biodiversity.

Moreover, the EU requires the farming sector to make important contributions to the implementation of the EU Biodiversity Strategy, the Water Framework Directive, the European Sustainable Development Strategy and climate protection. The farmers' remit is thus not merely to be a producer but to play a "multifunctional role" in rural areas. For farmers this means that they are saddled with tasks that are costing them money upfront without actually earning them any, since market prices for agricultural commodities simply do not include services performed by the farming sector as part of its multifunctional remit. Farmers therefore rightly expect to secure a fair income from the sale of their products on the market and as remuneration for the services they provide to society. Policymakers must support the farming sector in this respect by providing clear framework conditions. This in turn requires a combination of policies and instruments, regulatory provisions, controls, incentives and supports.

The Common Agricultural Policy is an important element of the Community's policy portfolio but it cannot by itself meet all the challenges. The KLU is of the opinion that the aim of the agricultural policy reform must be to strengthen environmentally friendly and socially sustainable production methods in such a way that they are competitive. The agricultural policy reform must, by 2020, take European farming a vital step forward towards resource conserving, climate friendly, efficient, ecologically compatible, economically, environmentally and socially sustainable, and regionally based production receiving adequate remuneration for the provision of public goods.

In November 2010 the EU Commission outlined three options, each of which described a different reform path for agricultural policy in the 2014-2020 period[2]. Option 1 would essentially maintain the existing practice of providing direct payments while Options 2 and 3 are indicative of a stronger focus on public goods delivered by farmers. To this end, Option 2 contains a "greening" component in Pillar 1 while under Option 3 direct payments would be phased out in favour of funds available for the provision of public goods and to support less-favoured areas.

Critics[3] have argued against a "greening" component in Pillar 1 on the basis that, due to the fact that such "greening" measures would need to be rather broad and general, its effectiveness would be limited and not sufficiently targeted. The KLU share this assessment in principle. Only a targeted and regionally differentiated combination with measures under Pillar 2 would allow for significant progress to be made in this respect. Consequently, it is likely that Option 3 would be the approach most strongly targeted towards achieving the provision of ecosystem services. However, it is doubtful whether Option 3 would allow for the implementation of effective measures in intensively farmed regions. Both the Commission's proposal and the public debate favour Option 2 which thus, at the present time, would appear to be the only realistic choice for CAP reform that is able to achieve consensus. Therefore, in the text below the KLU will largely focus on Option 2.

In how far agricultural policy can truly be "greened" using Option 2 will strongly depend on the detailed design of both the minimum requirements and the incentive structure. The KLU therefore outlines below its proposals for the general design of and concrete measures in the First Pillar (Section 2), reforms required in the Second Pillar (Section 3), and possible indicators for the evaluation of the current reform (Section 4).

2 The First Pillar

Payments within Pillar 1 have essentially been historically based and have not sufficiently been linked to the provision of public goods. The current debate on EU agricultural policy shows that this has at least been widely recognized. However, instead of instigating a true reform and preparing a new and coherent package of measures (as outlined in Option 3 of the Commission's Communication), the current two-pillar system will, in all likelihood, be maintained with the added "greening" of Pillar 1 (Option 2 of the Commission's Communication). The measures to be implemented as part of this "greening" component are currently under discussion.

It is the KLU's opinion that the way in which the "greening" component is integrated into Pillar 1, as well as the specific requirements and measures that are linked to it, will determine whether the "greening" component, the requirements of which go beyond the statutory minimum requirements, will prove to be the paradigm change needed and contribute to societal acceptance of the CAP. In the view of the KLU the following general criteria should therefore underpin the "greening" component:

- **The implementation of greening measures must in future be a mandatory requirement for the receipt of Pillar 1 supports, i.e.**

including the planned basic payment scheme. There is no longer any societal justification for the provision of a Pillar 1 basic payment that is not conditioned by "greening" measures.

- "Greening" measures must be fully implemented. All individual components of the "greening" are part of a whole and cannot be substituted for one another.
- Evidence of compliance with "greening" measures must be furnished annually to qualify for payments.
- Farmers incur opportunity costs for the implementation of measures as part of the "greening" component. Remuneration must consider these costs. Adequate remuneration for the provision of public goods is a key criterion for insuring that the greatest possible number of farmers, particularly including those in favoured and intensively farmed regions, will participate in the measures outlined below.
- Pillar 1 expenditure must be consistent with its impact in terms of the provision and safeguarding of public goods.

The "greening" of Pillar 1 as pursued by the Commission requires that measures are specified that are easy to monitor and efficient as to the targets to be achieved. The KLU proposes five measures below. What they all have in common is that they go beyond the statutory minimum standards. In the view of the KLU this is absolutely vital in order to justify the use of public funds. The order in which the measures are listed does not imply an order of importance, but rather it is the KLU's view that substantial progress in all these areas is essential.

2.1 Five concrete measures for "greening" Pillar 1 of the Common Agricultural Policy

2.1.1 Limit on nitrogen net balance surplus

Agri-environmental relevance:

The nitrogen (N) net balance surplus is an integrative indicator which is impacted upon by several agricultural parameters: structure of the holding (stocking rate, crop rotation), the intensity of fertilizer use, production processes (fertilizer applications). The nitrogen net balance surplus is closely linked to a number of different environmental aspects. It describes the total potential loss of reactive N compounds. The higher the nitrogen net balance surplus, the greater the risk of environmentally significant N emissions which impact on various aspects of the environment (watercourses, the atmosphere, natural habitats).

Indicator: Nitrogen net balance surplus

Target value: ≤50 kg N/ha UAA

UAA = Utilized agricultural area

Rationale: In determining tolerable N losses (50 kg N/ha UAA) equal consideration must be given to environmental impacts (critical discharge rates and loads), economic impacts (changes in yields and profits), and feasibility of implementation (initial situation of farm holdings, N savings potential).

Method: As there are a number of different methods to calculate nitrogen balances, it is necessary to precisely define the method to be used and the parameters for calculation. The calculation is to be based on a binding method for the calculation of N balances agreed at EU level. The farm gate balance after PARCOM would appear to be an appropriate method.

All relevant nitrogen flows and compounds (N inputs) must be recorded in the balance to allow for total potential losses to be determined. A "massaging of the figures" by omitting environmentally damaging N flows or those that do not function directly as fertilizers will thus be avoided. The only truly quantitatively effective method is to set maximum nitrogen net balance surpluses at the individual field level. This is however complex to implement. The farm gate balance sets a beneficial constraint with a view to achieving the sustainability objectives.

2.1.2 Limit on stocking rates

Agri-environmental relevance:

The stocking rate is an indicator for the linkage between livestock production and agricultural area; it is also a significant factor influencing nutrient flows in agro-ecosystems. As a variable, the stocking rate denotes the risk of nutrient deposition in watercourses (nitrates), atmospheric emissions (ammonia, nitrous oxide, methane), and nutrient accumulations (phosphorus) in the soil. In some regions of the EU there are high concentrations of livestock (>2.0 DE/ha UAA, DE = *Dungeinheit*, see below), necessitating feed imports (which potentially entail adverse environmental impacts as well as land use changes in the producer countries) and leading to excessive nitrogen and phosphorus net balance surpluses as well as low nutrient efficiency when livestock manure is applied as fertilizer. The emissions have adverse effects on the biotic environment (nutrient deposition in oligotrophic natural ecosystems, eutrophication, displacement of species of nutrient-poor habitats). A limit on stocking rates will not necessarily mean that all farm wastes arising will actually be applied to all of a holding's agricultural land. However, the indicator is a generally beneficial constraint with a view to supporting the European environmental and sustainability objectives, the achievement of which requires concrete measures such as closed nutrient-cycles and efficient use of farm wastes in order to reduce the need for synthetic fertilizers.

Indicator: Stocking rate

Target value: ≤2.0 DE/ha UAA.

DE = *Dungeinheit*. One "*Dungeinheit*" corresponds to 80 kg N/year from livestock manure.

Rationale: At stocking rates greater than 2.0 DE/ha UAA, efficient uptake of nutrients is no longer ensured. 2.0 DE/ha UAA are equivalent to a minimum nutrient input of 160 kg N/ha. Moreover, on soils susceptible to leaching, catch crops must be grown in order to prevent the leaching of nitrates during the winter leaching period.

Method: The calculation is to be based on a binding, productivity-related DE conversion key for all relevant livestock categories agreed at EU level. Alternatively the conversion key of the German "Technical Instructions on Air Quality Control" (*TA Luft*) is to be used.

The reference area is to be clearly defined (= documented own utilized agricultural area). If N produced is to be offset against agricultural lands on other holdings, evidence of the recipient holdings' acceptance of organic fertilizers must be furnished (supply contracts).

Stocking rates are easy to monitor (low recording effort; all data are available on the holdings).

2.1.3 Limit on the maximum proportion of any one crop type on arable lands

Agri-environmental relevance:

A limit on the maximum proportion of any one crop type on a holding's arable land aims at promoting crop type diversity. This would positively impact on soil fertility as well as support the resilience of agricultural holdings. Diverse crop rotations can help disrupt pathogen cycles and thus reduce pesticide use and promote agro-biodiversity. This will also positively impact on overall biodiversity.

Indicator: Proportion of crop type

Target value: ≤45 percent

Rationale: The proportion of any one crop type is indicative of the average crop rotation on a holding. A maximum of 45 percent per crop type ensures that the average crop rotation includes a minimum of three different crop types.

Method: Calculation of the share of individual crop types on a holding's arable land (excluding permanent grassland and permanent crops). Multi-annual crops would be considered separately in each individual cropping year.

2.1.4 Preservation of permanent pasture

Agri-environmental relevance:

The preservation of permanent pasture prevents such adverse and unavoidable environmental impacts as they arise when grassland is ploughed up. Soils underneath permanent grassland generally store greater amounts of carbon than those under arable use. A prohibition on the ploughing-up of grassland is a tried and tested method for avoiding the otherwise resulting CO_2 emissions. Moreover, due to the year-round soil cover and intensive root penetration, the continuation of grassland use contributes to maintaining and promoting soil fertility and reduces the risk of eutrophication. Greater nutrient retention under grassland also increases resource efficiency. In itself, permanent grassland contributes significantly to landscape diversity. Low-input permanent grassland in particular also enhances biodiversity.

Indicator: Area under permanent grassland

Target value: No change compared to reference value

Rationale: The ploughing up of permanent grassland unavoidably results in adverse environmental impacts. The object of setting a reference value is to at least stabilize the already low share of permanent grassland in agricultural landscapes.

Method: The reference value would be the acreage of permanent grassland of a holding at the time the measure is published. Ideally there would be a sufficiently long time lag between the establishment of the reference value and the introduction of the measure to prevent the ploughing up of grassland shortly before the measure is implemented.

2.1.5 Provision of ecological focus areas

Agri-environmental relevance:

The provision of ecological focus areas primarily serves to promote biodiversity in cultural landscapes. However, such a measure would also generate other positive impacts such as in terms of water pollution control, soil protection, and biological crop protection.

Indicator: Ecological focus areas (unfarmed land or farmed land managed primarily for biodiversity)

Target value: ≥10 percent a holding's agricultural area

Rationale: Biodiversity continues to decline, in particular in agriculturally favoured and intensively farmed regions (e.g. the very fertile German 'Börde' landscapes). Initially, a further contributing factor was that the production of renewable agricultural resources on "set-aside" land (e.g. oilseed rape for

biodiesel) was permitted. Later on, following the 2008 Health Check, compulsory (rotational) set-aside was completely abolished. Compulsory provision of "ecological focus areas" is needed to achieve a trend reversal in this respect. The establishment of such areas as "visible proof" of a change in agricultural policy could also foster greater societal acceptance of direct payments to the farming community as it would visualize the tenet of "public money for public goods". Habitat corridors and "stepping stones" are needed all through the landscape to safeguard biodiversity. The aim to establish and maintain such corridors has not yet been achieved throughout the wider landscape.

Method: This requirement could, for example, be met by riparian zones, hedgerows, wildflower strips, copses, succession areas and also semi-natural meadows and pastures. The KLU would like to emphasize that the majority of such areas should not be "set aside" but could be and should be used for low-input farming purposes. The KLU is of the opinion that the compulsory establishment or provision of such areas should be a condition for the receipt of direct payments. Intensive use of such areas, and the use of pesticides and/or mineral fertilizers on these areas would thus not be permitted. Measures to ensure ecologically compatible use and management intervention of such areas should be financed under Pillar 2. It is therefore of fundamental importance that the "greening" components of Pillar 1 and Pillar 2 are well coordinated. Moreover, it is imperative that there will be a mandatory spatial relationship between ecological focus areas and the remainder of the farmlands (it could be mandated for example that the ecological focus areas and the holding's other farmland must be located within the same physiographic area). This is to avoid a situation where the ecological focus areas are 'transferred' into agriculturally less favoured areas and thus loose their potential to contribute to the "greening" of agriculture in the intensively farmed regions in particular. Due to cost-benefit considerations, farm managers should be granted a degree of flexibility and choice in determining individual suitable areas and their characteristics. The more high-yielding a site and the higher agricultural commodity prices, the greater the costs of establishing ecological focus areas, both at the individual farm (compliance costs) and the macro-economic level (transaction costs). Possible choices must be evaluated in terms of both their costs and benefits, i.e. their contribution to enhancing biodiversity. The individual farmer should be allowed to decide on the most efficient measures in each case, within the constraints of conservation requirements.

The KLU is conscious of the fact that some of these measures may be considered as "very strict" requirements by farmers in agriculturally favoured or intensively farmed areas, leading to some farmers actually "dropping out" of the EU support system and foregoing Pillar 1 funding altogether. As the farming sector is subject to influences that will not adapt to new realities overnight (e.g. the lease market), consideration might be given to a

transition into the new system that is tolerant of this fact. Ultimately the relationship between the level of premia and future price trends will determine which of the farms will participate. Only sophisticated criteria justify high area payments with a view to the efficient provision of public goods. However, meeting these criteria will not be easy for all farms. In contrast, less demanding criteria favour broad participation throughout but this comes at the price of low effectiveness in terms of the environmental and sustainability objectives outlined in Section 4.

Integration of semi-natural grasslands into Pillar 1

The KLU is of the opinion that semi-natural grasslands such as, for example, former commonages, common grazing lands, or unimproved grasslands mown for livestock bedding (juniper heaths in the low mountain ranges, alpine pastures in the Alps, semi-open pasture landscapes, *Calluna* heaths in the north-western German lowlands) should be integrated into the EU support system under the new Pillar 1. On such grasslands, sustainable agricultural land use leads to high biodiversity. They are thus superb examples of the multifunctionality of agriculture. However, to date it has been impossible or very difficult to receive Pillar 1 support for these types of farmland. Changes made to the eligibility rules with a view to integrating semi-natural grasslands into Pillar 1 (in particular Article 34 (2)(b)(i) of Reg. 73/2009) have alleviated the situation in individual cases but have not solved the problem.

The KLU therefore calls for semi-natural grassland to be categorized separately to 'conventional' grassland and arable land, and for it to be integrated into the EU support system. The conditions under which these grasslands can be considered as eligible areas should be defined in such a way that they primarily include grazing land and/or meadows not subject to production measures such as pesticide use, except for spot treatments, or fertilizer use. All landscape features embedded in the semi-natural grassland areas (e.g. areas of rock, copses, scree, stones, ditches) should be included in the eligible area. It will not be necessary to separately determine the location and size of these landscape features.

2.3 The future of cross compliance

The objective of cross compliance to date has been to monitor and enforce compliance with Statutory Management Requirements as well as Good Agricultural and Environmental Conditions (GAEC). Non-compliance triggered reductions of Pillar 1 direct payments and in certain cases also Pillar 2 supports. The current cross compliance conditions have only brought marginal improvements in terms of environmental objectives. They can therefore no longer be used to legitimise EU agricultural subsidies. Moreover, cross compliance has imposed a high administrative burden on both farmers and the regulatory agencies. If the "greening" measures as outlined above for Pillar 1 are implemented and new EU-wide standards are established for improved enforcement of sectoral legislation, then, and only then, can cross compliance be dispensed with. The abolition of cross compliance would in turn mean that the "greening" components of the CAP could be implemented without creating additional administrative burdens. It must

be pointed out however, that monitoring of compliance with sectoral legislation also entails a degree of bureaucracy.

3 The Second Pillar

It is the KLU's opinion that Pillar 2 measures designed to achieve conservation, environmental and climate change objectives should also be strengthened significantly. The tenet of "public money for public goods" must equally apply to Pillar 2. Second pillar programming at the level of the Member States can take account of specific regional conditions, such as certain physiographic features or particularly agricultural structures, and can thus contribute significantly to a multifunctional EU agricultural policy, building on the general EU provisions for the "greening" of Pillar 1. This will however necessitate a considerable financial strengthening of and comprehensive improvements to Pillar 2 which are lacking in the Commission's proposals. The KLU proposes the following central elements for reform:

- Agri-environment and forest-environment programmes are key instruments for remunerating land owners for undertaking targeted measures that benefit nature and the environment. Support for agri-environmental measures requiring that land users engage in active management for biodiversity should also be available for the ecological focus areas under Pillar 1. This would allow for ecological focus areas to be spatially targeted and optimised with the aid of regional measures. In general, agri-environment and forest-environment programmes must be made much more attractive by reinstating the payments' incentive component and offering result-based remuneration. In the WTO negotiations, steps must be taken in due course to ensure that these modifications can be made by 2014. Moreover, there must be an option to extend the duration of agri-environment and forest-environment schemes to adapt to the relevant environmental/conservation objectives. Additionally, agri-environment and forest-environment measures should be combined with advisory and training/education measures.
- From the environmental point of view, capital investment measures under Pillar 2 geared at strengthening public goods also continue to gain in importance. For example, the restoration of peatlands can make important contributions to combating climate change, protecting water resources, and nature conservation while incurring relatively low CO_2 avoidance costs. Going forward, such capital investment measures (e.g. blocking of drains, land acquisition) including the related advisory, preparation, planning and implementation measures must be fully eligible for support. Generous compensation should also be payable to farmers who convert their holdings for environmental reasons. Current impediments, such as with regard to land acquisition, the ineligibility of the VAT component for capital investment support claim purposes, or the strict focus of capital investment support on rural areas, must be addressed. Moreover, capital investment measures must also be made available on lands not utilized for agricultural or forestry purposes (e.g. watercourses and peatlands). The narrow focus on farmland and forestry land is incompatible with the implementation of

the Water Framework Directive and the establishment of the NATURA 2000 system of protected areas.

- To a significant extent Pillar 2 funding has supported environmentally damaging activities (such as land improvement, irrigation measures, afforestation of high nature value open habitats, construction of roads and tracks). Therefore, all support measures must, as a minimum, require up-front evidence that they will not result in adverse environmental impacts with respect to all six environmental and sustainability objectives listed in Section 4 below, or in adverse impacts with respect to animal welfare, and that at least one of the objectives given in Section 4 will benefit. Important Pillar 2 supports, such as farm investment schemes and all other measures of the current Axis 1 of the EAFRD should generally only be funded if they deliver demonstrable environmental and conservation benefits.
- To date, the integration of environmental concerns into the second pillar has been inadequate. The KLU therefore considers it imperative that expenditure be "ear-marked" for environmental purposes. The relevant programming documents must outline how the European environmental objectives (NATURA 2000, Water Framework Directive) are implemented. A minimum of one third of Pillar 2 funds should be dedicated to each of these two objectives. Measures often serve both objectives at the same time and this could be reflected in the allocation. Furthermore, EU co-funding for these Community objectives should be increased to 90 % in order to ensure rapid implementation in all areas, including the financially weak regions.
- Compensation payments for disadvantaged areas will continue to be funded under Pillar 2. Stronger support should be provided to compensate for handicaps at the individual farm level, with special consideration to be given to farms in upland areas.
- For environmental reasons, the KLU does not accept the proposal by the Commission to introduce risk management tools as a new measure under Pillar 2. Insurance against commercial risks should remain a private responsibility of landowners, as otherwise there may be a risk that environmentally questionable land use practices will be supported through subsidised insurance solutions. For example, tillage farming in areas liable to flooding could become more lucrative if EU-supported crop insurance compensates for crop losses in the event of flooding. Similarly, narrow crop rotations involving maize might be encouraged if resultant pest problems are covered by insurance.
- The KLU feels that in order to enhance the appeal of Pillar 2, a significant "slimming down" of the Community's specifications for planning, administration and control will be indispensable. Annual reports, strategic plans, excessive and not particularly expedient specifications for monitoring and evaluation, as well as sanctions and controls which, in part, are excessively strict must be limited and the number of regulatory agencies must be reduced back to a level that is tolerable by both farmers and the administration. If a substantive "greening" of Pillar 1 was achieved, cross compliance as a baseline for agri-environment and agri-forestry

schemes could also be abolished in Pillar 2. The KLU notes with concern that the acceptance of Pillar 2 amongst farmers and other important stakeholders, including environmental organisations, has suffered unnecessarily as a result of overly complex administrative provisions. Positive approaches such as regional programming or the intensive participation of economic and social partners have suffered accordingly. Results-oriented approaches and indicators that are simple to administer and enforce should be introduced to remedy this situation.

An important function of Pillar 2 is to balance compensation for existing services and support for additional activities with a view to delivering environmental and sustainability outcomes. The 'greening' component within Pillar 1 can merely set new minimum standards which may encourage additional activities in intensively farmed regions. Additional compensation and incentives for the delivery of environmental services going beyond these minimum standards, especially in areas where there is a particularly urgent need for action or protective measures, will be critical for achieving the European environmental and sustainability objectives.

4 Impact indicators for the period to 2020

At an appropriate stage the pending CAP reform will need to be the subject of a performance review (midterm review). For this evaluation, the KLU proposes the following six environmental and sustainability objectives which in many areas have quantitative underpinnings in both policy and/or the relevant technical fields. They are descriptive of the environmental framework conditions to be achieved by the European farming sector by 2020.

1. To increase **resource efficiency** with regard to water, nitrogen, phosphate, energy: In order to maintain current levels of productivity while using significantly fewer resources, input-output balances for agricultural products must improve considerably. For example, to avoid the transgression of the Earth's boundaries in terms of the global nitrogen cycle would necessitate a reduction of the global use of nitrogen, especially in the form of mineral fertilizers, to a quarter of the current level[4]. From a technical point of view, reductions in the use of energy and mineral fertilizers in the order of 10-30 % by 2020 would be achievable in Europe.
2. To reduce nutrient losses contributing to the **eutrophication** of aquatic as well as terrestrial ecosystems and impacting on air quality: The objectives of the NEC Directive for the period up to 2010, the revised NEC Directive for the period up to 2020 that is yet to be agreed, and the Water Framework Directive for the period up to 2015 (with possible extensions to 2021 or 2027) to achieve "good status" for all Community waters must be achieved. In accordance with the Thematic Strategy on Air Pollution (EC 2005) there must be a reduction of around 44% in the area of ecosystems receiving nitrogen deposition rates exceeding critical loads, compared to the baseline situation of 2000[5].

3. To reduce **greenhouse gas emissions** from agriculture and forestry[6] and to increase carbon sequestration in agricultural production systems: In accordance with European emission reduction objectives for 2020, climate-relevant emissions from agriculture must be reduced to a similar extent as in other sectors while respecting cost efficiency. The EU has a 30 % emissions reduction target compared to 1990 levels.
4. To maintain and enhance **diversity in the regions, in production processes and in individual farm structures** with a view to spreading risk to manage climate variability, maintaining historically developed cultural landscapes, and maintaining employment in rural areas: A quantitative indicator for this objective is not available. A possible indicator would be a non-increase of damage to agricultural infrastructure, livestock, and crops caused by extreme weather events.
5. To increase **biodiversity**: The continuing loss of species of flora and fauna as well as habitats in the agricultural landscapes must be halted and reversed (trend reversal in biodiversity conservation). Specifications and evaluations are to be based on the "Indicator Report 2010 to the National Strategy on Biological Diversity" for Germany and similar documents in other EU Member States respectively[7].
6. To maintain and enhance **soil fertility**: Erosion protection, prevention of soil compaction, and agro-ecological principles of soil organic matter management must be established throughout vulnerable areas.

Practical experience will show whether the "greening" component will help to achieve quantifiable progress in environmental protection and nature conservation. Should the reservations against Option 2 as outlined in the first section of this report be confirmed, i.e. should the "greening" of Pillar 1 not yield the desired outcomes, Option 3 (cuts made to Pillar 1, redistribution of funds to Pillar 2) should be considered as further steps to reform the CAP are taken.

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[1] Barroso (2010): EU 2020

[2] COM/2010/0672 final: "The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future". 18 Nov. 2010

[3] For example, the Federal Government's Scientific Advisory Board on Agricultural Policy (Wissenschaftlicher Beirat Agrarpolitik der Bundesregierung, WBA).

[4] Rockström, J. et al. (2009): "A safe operating space for humanity." Nature 461, p. 472-475.

[5] CEC (2005). Communication from the Commission to the Council and the European Parliament on a Thematic Strategy on Air Pollution. SEC(2005) 1132, Commission of the European Communities, Brussels.

[6] Including inputs, fuel consumption, Land Use, Land-Use Change and Forestry (LULUCF) as well as carbon offsets available in the LULUCF sector.

[7] BMU (2010): "Indicator Report 2010 to the National Strategy on Biological Diversity".