

Eco-Schemes: Golden bullet or an additional unnecessary gadget

Challenges for a federal state to implement eco-schemes efficiently

Maren Birkenstock and Norbert Röder

Thünen Institute of Rural Studies

maren.birkenstock@thuenen.de

norbert.roeder@thuenen.de



Paper prepared for presentation at the 172nd EAAE Seminar 'Agricultural policy for the environment or environmental policy for agriculture?'

May 28-29, 2019.

Brussels.

Copyright 2019 by [Maren Birkenstock and Norbert Röder]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

1 Introduction

The European Union (EU) pays direct aid to farmers under the first pillar of its Common Agricultural Policy (CAP). An important objective of these direct payments is to support farmers' incomes. However, the CAP is increasingly criticised for not being sufficiently focused on limiting the negative impact of certain agricultural practices on the environment and climate (e.g. Pe'er et al., 2014). With the 2013 CAP reform, these income payments were therefore linked to a "greening component". Its intention was to increase the provision of public goods delivered by direct payments. Unfortunately, greening has hardly contributed to improving the environmental and climate performance of the CAP. (ECA, 2017; Hart et al., 2017). In June 2018, the Commission published its legislative proposals and designed components for a new so called "Green Architecture" in the European Agricultural Policy for 2021 (COM(2018) 392 final; COM(2018) 393 final; COM(2018) 394 final), trying to take some of the previous criticism into account.

The "Green Architecture" consists of well-known instruments like the agri-environmental measures (AECM) of the second pillar, the conditionality (a merger of cross compliance and the greening) and a new instrument the Eco-schemes. This "Green Architecture" should be designed by the Member States in a setting of increased flexibility. Up to now, compliance with the requirements known as cross-compliance has been the basic prerequisite for receiving land payments under the CAP and compliance with the greening requirements has been the prerequisite for receiving the ecological component of direct payments (greening). According to the legislative proposals, the cross-compliance requirements for the receipt of payments should be continued as "conditionality". This conditionality includes the current requirements of cross-compliance as well as the obligations of the previous "greening" of the first pillar. The CAP Strategic Plan Regulation offers the Member States the opportunity to grant in addition to the 'basic income support for sustainability' (former known as "direct payments"), an annual support scheme for climate and environmental measures ("eco-schemes"). These schemes must be implemented by the member states but no minimum budget allocation is required. The participation is voluntary for the farmer. The legal framework for the AECM of the second pillar remains more or less constant. They are addressed in Art. 65 of the Strategic Plan Regulation together with other management commitments. In future, each Member State should draw up a CAP strategic plan. According to the specific objectives and needs identified, the Member State will set target values, define interventions (measures) and allocate financial resources. Within this strategic plan, the Member States lay down both pillars, and thus not only the second pillar in the programmes for rural development as they have done so far, with measures and financial resources to address the specific challenges of agriculture and rural areas as precisely as possible. This means that the implementation of the first pillar with the European Agricultural Guarantee Fund (EAGF) can in future be shaped more strongly by the Member States and adapted to their respective requirements. For Germany the challenge for designing a strategic plan targeting environmental issues will be: a) coordinating the instruments of conditionality, eco-scheme and Agri-environment-climate-measures (AECM) with each other, b) the distribution of competences, taking into account the constitution of a federal state, but also c) the "fair" distribution of support payments between and within the federal states. The competing interests of the Länder will slow down the political process.

Therefore, the question we would like to address: What chances offer, and problems face eco-schemes and especially income generating eco-scheme measures, in federal organized member states? What must the member states take into account when designing their strategic plans so that

eco-schemes can achieve an ecological effect and are not hindered by problems at an administrative level? In the following we will discuss these questions based on the example of the "Public good bonus" (PGB) (Dierking et al., 2017). The PGB is one option to design Eco-Schemes with income effect according to (Art. 28 (6) a)). To address the question, we studied the available documents and conducted interviews with representatives from German state ministries on the feasibility of Eco-Schemes based on this approach. In the following paper we will first present the institutional and constitutional conditions in Germany and the current status of the strategic plan development and briefly introduce the Public Good Bonus approach. In the chapter "Methodology" we will explain our approach and the reasons for choosing this approach. We will present our results in the chapters "Challenges rooted in the structure of administration", "Content related challenges and difficulties to identify efficient annual environmental measures" and "Challenges associated with the political decision-making process". We will end with a conclusion.

2 Background

2.1 Implementation of the CAP in Germany and legal competencies of the Federal Government and the Länder with respect to the design of agri-environmental policies

Germany, as a federally organized member state, faces special challenges with respect to the design of a CAP strategic plan. First of all, we address the different legal competences of the different levels. According to the provisions of the German Constitution (Art. 72 et seq.), the Länder are responsible for carrying out state tasks, except in specifically regulated areas. This means that the Länder take over the administrative regulated on the federal level (e.g. the legal act on direct payments), but also have their own responsibilities for which they can design the legal acts and also take over the administration (e.g. for the areas of environmental protection and landscape conservation). Germany consists of 16 Länder, 13 of which have so far implemented their own policy for rural areas in the second pillar, with 13 administration bodies on their own. The Länder differ markedly w. r. t. challenges in rural areas (ecologic, social or economic), the structure and size of the agricultural holdings, the availability of own budget and administrative resources and the present endowment with EAFRD funds. These differences are reflected and partly amplified by differences in the vision of the respective governing parties for agriculture. In consequence the legal agri-environmental framework differs between the Länder as well as the ideas for the design of the "green architecture". Examples of these differences in the legal framework are, for example, different specifications for the preservation of landscape elements, the width of buffer stripes and specifications for grassland protection.

Germany's **first pillar** comprises nationwide direct payment rates and is completely decoupled. Legislative competence lies with the federal government. The Länder are responsible for administration. The **second pillar** programmes (e.g. AECM) are the responsibility of the Länder and the Länder must therefore ensure the co-financing. The federal government reimburses the Länder with up to 60 percent of the expenditure incurred via the "Gemeinschaftsaufgabe Agrarstruktur und Küstenschutz" (GAK), if the respective measure is listed in the GAK until the Land has reached its respective GAK budget ceiling. A consequence of this approach is that in Germany the administrative costs for Eco-Schemes and also for AECM are in any case incurred by the Länder. If these AECM are very specific measures with rather high administrative expenditure (e.g. control of cut

dates, pasture management, etc.), the costs for the Länder will also be higher. In the administration the options to realize economies of scale vary markedly between the Länder. The amplitude ranges from Bavaria with roughly 90.000 farms managing over three million ha of utilized agricultural areas (UAA) to the Saarland or the Eastern Germany states with a few thousand (Destatis, 2018).

While the first pillar is since 2019 a German wide national flat rate payment per ha, the distribution of national and EU funds between the Länder shows marked differences (Table 1). The EU and national co-financing of the ELER ranges from 92 EUR per ha UAA and year in Northrhine-Westphalia to 185 in Saxony. These differences in the allocation of funds can at least partly be explained by historical reasons, as the distribution of funds was designed to balance the uneven distribution of first pillar funds between the Länder prior to 2005.

Table 1: Distribution of the EU ELER and the national GAK funds between the federal states

Land	€ / ha (UAA)		Land	€ / ha (UAA)	
	ELER	GAK		ELER	GAK
Baden-Württemberg	62	62	Rhineland-Palatinate	53	68
Bavaria	59	53	Saarland	53	77
Brandenburg	105	58	Saxony	129	56
Hesse	50	53	Saxony-Anhalt	95	44
Mecklenburg Western Pomerania	90	52	Schleswig-Holstein	50	55
Lower Saxony	52	50	Thuringia	115	61
Northrhine Westphalia	51	41			

Source BMEL 2016¹

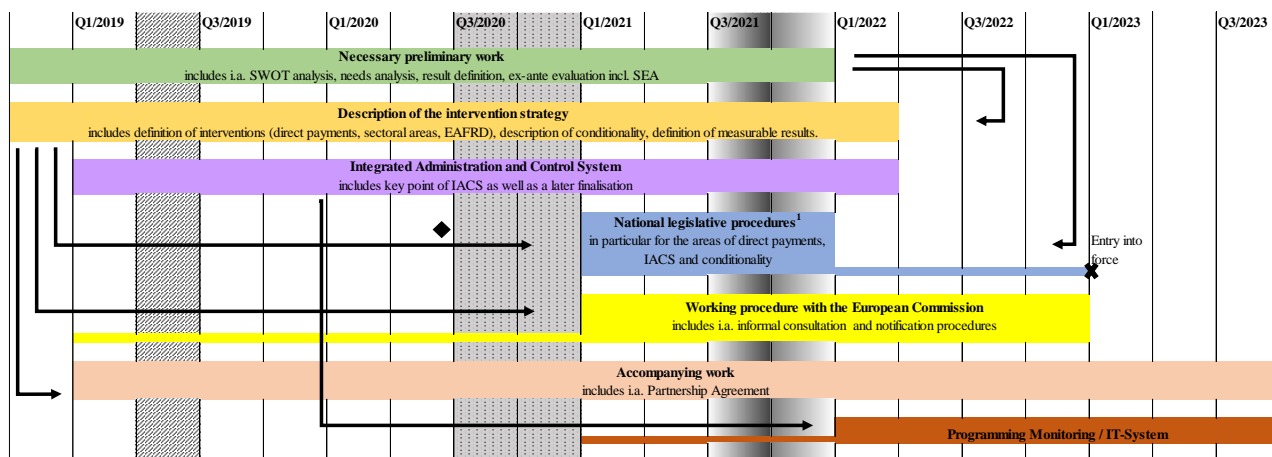
For the CAP system proposed from 2021 on this means: The design of the Eco-Schemes is initially a mandate to the Member State from the European Commission. According to the German constitution the Länder are responsible for nature conservation and landscape management. Increased ambitions in the first pillar to address environmental protection and landscape conservation issues could therefore potentially infringe the Länder's legislative powers. Consequently, the federal government will vary likely select the measures to be implemented for the Eco-Schemes in close cooperation with the Länder. If the Federal Government and the Länder do not succeed in reaching a joint agreement, there is latent and somewhat hypothetical risk that a suit is filed by one of the Länder at the Federal Constitutional Court. This suit could significantly delay the political process needed for the implementation of one-year measures in the first pillar. If the generally opinion favours a more ambitious implementation of the Green Architecture and in particular of the Eco-Schemes, the option to file a suit, and just the public threat to use the option, strongly backs up minority positions among the Länder.

The design of the Eco-Schemes predetermines the options the Länder have regarding AECM. Planning must take into account a coordinated timetable (Fig. 1). The activities depicted there require coordination between and within the Länder and will therefore require a great deal of time. In the necessary preparatory work (SWOT analysis, needs analysis, target definition), the description of the intervention logic (e.g. definition of interventions such as direct payments, description of conditionality, EAFRD), as well as in the definition of the key points for the administration and control system (IACS), the countries must be involved, since they are either responsible for administrative implementation or because the tasks, as in the case of the EAFRD also fall within their substantive

¹ https://www.bmel.de/DE/Landwirtschaft/Foerderung-Agrarsozialpolitik/GAK/_Texte/Erlaeuterungen.html

competences. Within the national legislative procedure, all laws and ordinances enacted by the Federal Level will require the approval of the Länder. This means that the approval of the Länder in the Bundesrat is required for the federal laws (e.g. for direct payments and Eco-Schemes), or the required laws within the framework of EAFRD must be passed in each of the Länder themselves.

Fig. 1 Preparation Process for the German Strategic Plan



¹ includes laws and regulations for the Federal Government and coordination and consultation processes for all 13 Länder. EAFRD needs 13 law regulation processes in all 13 countries as well

- German EU-Council Presidency
- Bundestag elections and government formation
- European Parliament elections and new commission formation
- Work processes that influence each other
- Political decision on national CAP implementation in Germany

Source: Based on (BMEL, 2019)

The real challenge begins when the initial strategic plan is not approved by the Commission and adaptation must be made in particular with respect to environmental ambition level. In case the Commission demands a more demanding layout of Eco-Scheme, the financial equilibrium between the Länder might get out of balance and must be rebalanced. In addition a changed focus of the Eco-Scheme might have implications for the content of one or many rural development programs.

In the same way, it will become difficult in the federal structure to pass on adjustment demands from the Commission via the Member States to the Länder. So far, the Länder have been solely responsible to the Commission for meeting the outputs intended by their Rural Development Plans (EPRDs) to free the performance bonus. However, in future there is only one CAP strategic plan, which identifies the member state as the addressee of responsibility to the Commission. It is therefore unclear how demands for adjustments resulting from the annual performance review can be attributed to specific Länder. A likely cause for adjustments is that the deviation of the realized outputs and / or results from the respective planned values exceeds the admissible corridors. Especially, the current demand to differentiate outputs and results by unit amount greatly increases the risk to leave the corridors.

2.2 Public Good Bonus

The “Public good bonus” focuses on agricultural services in the field of the environment and resource conservation (Dierking et al., 2017). The aim of the approach is:

- to channel public money more effectively into measurable public services in agriculture,
- to achieve bureaucratic simplifications for agriculture and administration,
- preserve the entrepreneurial freedom of farmers to make decisions,
- to create economic incentives / additional motivation among them for the provision of services of public interest.

The core of the “public good bonus” is an evaluation method that determines agricultural services of general interest (biodiversity, climate, water) on the basis of farm management data and converts the assumed service provision into points. Each year, the farmer decides to which extent and with what measures he wants to generate points and which areas are subject to the management requirements (e.g. no mineral fertilisation). Complex management requirements (e.g. extensive grassland management) are broken down into their specific components (reduced or abandoned fertilization or compliance with specific dates of the first cutting). These components are scored individually. Dark green measures, i.e. context-specific species and biotope protection measures should not be rewarded via the points system. This raises the question of how the distinction between these programmes is made and how any existing double funding problems are to be dealt with.

We chose the approach of Dierking et al. (2017), because the structural features of the approach, such as a one-year commitment period and no orientation of the payment towards cost compensation, would make it compatible with the Eco-Schemes instrument mentioned in the legislative proposal. Art. 28 (6) a) also gives the possibility to grant annual payments as additional payments to the basic income support.

3 Methodology

3.1 Literature review

After reviewing the current legislative proposals from the Commission followed by a literature review on current implementation of the CAP (Röder et al., 2018; ECA, 2017; Hart et al., 2017; Schoof et al., 2018) and perspectives on the legislative proposals for the upcoming CAP from 2021 on (Matthews, 2019; Fährmann und Grajewski, 2018; Birkenstock und Röder, 2018) we conducted interviews based on the approach for a “Public Goods Bonus” by Dierking et al. (2017) to gain a better understanding of the administrations' perspective on the design of Eco-Schemes in different German federal states (Länder).

3.2 Interviews

We conducted interviews with representatives from several German federal states and the German federal government on the possible implementation of annual measures. In order to check the transferability of the method for levying the “public good bonus”, interviews were carried out with administrative representatives in the federal states of Saxony, Baden-Wuerttemberg, Brandenburg, Lower Saxony and Schleswig-Holstein. These states differ considerably in terms of the structure of their IACS systems, the extent in which they currently implement AECM and the existing administrative capacities.

The focus of our interviews was on the consideration of the integrated accounting and control System (IACS) and the resulting possible administrative obstacles in general. The possibility of taking

such measures into account and monitoring them within the framework of eco-schemes was also discussed. On the basis of the results we identified challenges for the administrative implementation of annual measures and propose options to tackle this issue in the implementation of eco-schemes. We divide our findings into three sections: (1) challenges mainly rooted in the structure of the administrative itself, (2) challenges which are content-related and address difficulties identifying efficient annual environmental measures and (3) challenges which associated with the political decision-making process.

4 Results

4.1 Challenges rooted in the structure of administration

The member states can choose among two options for implementing these eco-schemes. Under the first option (Art. 28 (6) (a)), Member States grant payments for Eco-Scheme measures in addition to the „basic income support for sustainability“. This means that the payments may have an income-supporting effect as other first pillar payments. Under the second option (Art. 28 (6) (b)), the payment may not exceed the total additional costs and income losses of the farmer as a result of the commitments to the eco-schemes measures. Eco-schemes according to Art. 28 (6) (b) thus function analogously to the current compensation for agri-environmental and climate measures (AECM). For both cases is no budget reserved for it, yet. In any case a double funding must be avoided if the eco-schemes and AECM are implemented on the same piece of land and a suitable relationship to conditionality, whose conditions must be fulfilled first and foremost, must be established.

The relationship of Eco-Schemes to conditionality

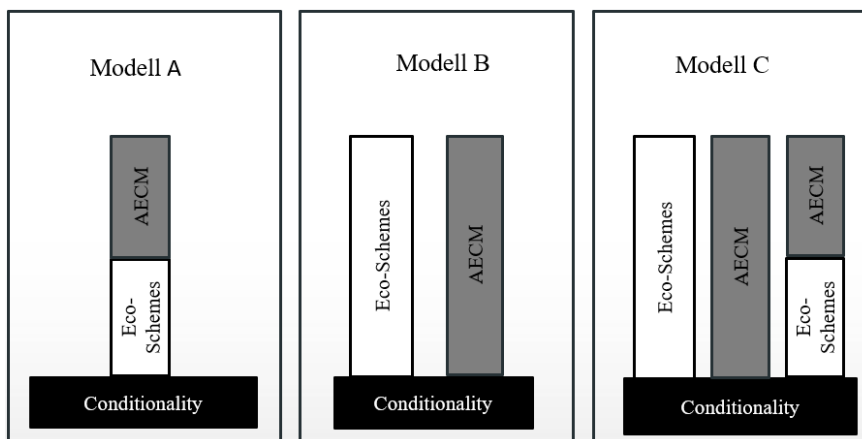
Among the challenges eco-schemes have to face at the administrative level, one crucial aspect is the differentiation between the measures of the eco-schemes in the first pillar and AECM in the second pillar and the ‘conditionality’ as third main component of the new ‘Green Architecture’. As in the past "cross-compliance", the conditionalities describe a minimum level and do not take into account differences in the costs of providing environmental services. Such environmental services are only additional if the conditionalities go beyond existing regulatory law. Otherwise, it is simply a matter of compliance with existing law. The German Länder apply different regulatory laws. This means that conditionality in each country is based on different starting conditions for farmers. The design of the funding framework is made more difficult by the fact that according to the Commission's proposals, all so-called ‘greening’ measures from the funding period up to 2020 will be addressed by the new conditionality from 2020 on and can therefore no longer be offered as eco-schemes. The level of conditionality was therefore discussed intensively in our interviews. From the perspective of a few country representatives, it is seen as an improvement if the measures of the Eco-Schemes are identical in content to the individual requirements of conditionality. The scope of a measure provided by the agricultural enterprises could serve as a distinguishing feature. As an example, in this context, representatives from different Länder proposed that, in order to comply with conditionality, farms must provide a certain share of agricultural area under measure X (e.g. to abandon production on 3 % of the UAA. If the farmers intend also to apply for support for Eco Scheme measures, the farmer must abandon production on additional areas e.g. additional 5 % of the UAA. The administrations surveyed argued against a differentiated valuation of the area supported by the Eco-

Scheme.² The administrative work is made much easier if every hectare counts the same. It should also be borne in mind that, in the event of strong conditionality, some farms will tend to forego direct payments and thus also the Eco-Schemes and will therefore not have to comply with the conditionality esp. the aspects not regulated in ordinance law. This is particularly the case if the costs of complying with the conditionality is greater than the direct payments.

Implementation of Green architecture to avoid double funding

A second crucial issue is the interaction between Eco-Schemes and AECMs. The different implementation possibilities have different consequences for the Green Architecture. In order to clarify which aspects, have to be considered for the avoidance of double funding, we would like to briefly describe the different implementation possibilities. Fig. 2 illustrates the different options.

Fig. 2 Possibilities of linking Eco-Schemes and AECM



With the alternative approach b) from the above figure 3, Eco-Schemes and AECM can be designed as parallel and largely independent structures. With such a structure, certain funding areas or measures would be completely offered either in the Eco-Schemes or in the AECM (second pillar) (e.g. diverse crop rotation, catch crops, organic farming addressed in Eco-Schemes; all other aspects addressed via AECM). Such a design would significantly simplify the implementation process and there would be clear administrative responsibilities. The challenge is to establish a sufficiently clear division of tasks and avoid the creation of double structures. The issue is complicated in Germany by the fact that first and second pillar payments are administered according to two different principles. First pillar payments are administered by the federal state where the farm is located while second pillar payments are administered according by the federal state where the supported piece of land is located. The likelihood of overlapping administrative responsibilities close to the different borders within Germany is therefore very high and the hoped-for administrative simplification through the separation of the two subsidy systems could possibly not occur in the first place. In addition, it is fairly easy to assign measures applicable on arable land to one of the boxes (Eco-Schemes and AECM), as wide set of different management practices exists that are fairly independent of each other and target different aspects. However, with respect to grassland management the story is much more complicated. Nearly all measures applied on grassland try to limit the utilization

² Such a differentiated valuation is currently implemented in the Ecological focus areas of the Greening

intensity and use only different indicators to achieve this goal (e.g. fertilization restrictions, prescribed stocking rates or dates of first cutting, indicator species).

The Commission's legislative proposal offers administrations the possibility of offering both one-year Eco-Schemes measures and five-year second pillar agri-environmental measures on the same piece of land within one year (Options 1a) and 1c)). The initial situation of our interview included the possibility, also in these cases, of extending the payments for measures under the Eco-Schemes beyond measure-related income losses, and thus gain income. This poses administrative challenges. This is particularly true if AECM is to be used to further qualify areas that are already being supported by the Eco-Schemes. An example of this challenge is, for example, when basic support for extensive grassland management is provided by Eco-Schemes and certain species and biotope protection measures are implemented under the second pillar. In the delimitation of the support measures, it must be ensured that there is no double funding, i.e. that no (partial) service is rewarded several times.

According to Art. 86 No. 2. (COM(2018) 392 final) agri-environment and climate measures should account for 30 % of payments under the second pillar. There is no comparable specification for the Eco-Schemes. The higher the budget share dedicated to Eco-Scheme, the more difficult it will be for the member states and Länder to meet the 30% requirement in the second pillar. The federal states are therefore occasionally concerned that an extensive range of "dark green" measures in the Eco Schemes could lead to their no longer being in a position to fulfil the 30 % quota prescribed in the second pillar. So far there are few incentives for the member states to put a strong emphasize on Eco-Schemes.

Well-known challenges: Control and sanction mechanisms

Unfortunately, options for the eco-schemes being easy to administer stand-alone in the first pillar or, become challenging when considering the interaction with the second pillar. The administrations surveyed identified as challenges the fact that agri-environmental and climate measures (AECM) and Eco-Schemes continue to be two completely different support systems. Different measures on the same areas may still have to be controlled at different times. This leads to considerable administrative effort and costs.

The checks shall be carried out in such a way as to ensure that the action carried out does not deviate from the result agreed with the management. The result is only met if the measure is implemented exactly as specified or deviates only within the prescribed tolerance limits. From the point of view of all interviewees in the state ministries, these tolerance limits are currently too narrow. In order to ensure smooth implementation with the lowest possible administrative effort, everyone was therefore in favour of increasing these tolerance limits in future. So far, for example, the area size as well as the minimum and maximum width are specified for flowering areas. This is very error-prone. From the point of view of the federal states departments, it is proposed to adapt the tolerance limits to measurement accuracies that can be easily achieved under practical conditions. Not every deviation would automatically lead to a sanction. Each sanction must be documented over time and will result in higher sanctions if there are repeated infringements of the same facts. At present, this causes a great deal of administrative effort without the sanctions being based on corresponding environmental damage. To what extent the increase of the tolerance limits at the end is really a suitable means to reduce the administrative effort was doubted by individual discussion partners, as the sanction cases, which arise despite larger tolerance limits, must continue to be documented by the

administration with the same effort and care and maintained over time. In addition, there is the cost of drawing appropriate independent control samples, especially for measures that have several control dates. These rules do not apply to all groups of agricultural farms to the same extent. For example, in farms with large livestock, the probability of annual errors due to missing individual ear tags is very high. Such farms are therefore more often affected by increasing sanctions.

In addition, the state ministries pointed out the danger of “retroactive sanctions”. As soon as it is possible to implement both one-year and multi-year measures on the same site, the sanction risk of one measure will influence the risk of the other measure. Thus the controls of the one-year measures could also have retroactive effects on the sanctioning of the multi-year AECM located on the same area. Although the Member States have the freedom, under the legislative proposal, to design the control and sanction mechanisms themselves, the representatives of the Länder were sceptical how much freedom they would actually have in the end and how much of it would be restricted again by delegated acts and guidelines from the Commission.

4.2 Content related challenges and difficulties to identify efficient annual environmental measures

Another issue is to identify and design measures generating a positive environmental impact even with a one-year implementation period and information available for the authorities in May, as the 15th of May is so far the application deadline for agricultural subsidies. Based on the interviews and the literature we defined criteria for the suitability of measures for the implementation within eco-scheme framework. We differentiate five groups of measures with respect to their technical suitability:

- (1) Measures providing a benefit even with a one-year implementation only,

Based on the results of the administrative survey, we have established that this category primarily includes measures that can already be implemented in the current funding scheme by registering measures under the first pillar. These are above all measures such as "crop diversity", "grazing payment" and "catch crops". Measures that influence the parcel structure would also be possible.

- (2) Measures providing its full effect only after several years; however, the nature of the measure makes a multi-annual implementation by farmers likely

These could be, for example, measures like organic farming. The decision to operate an organic farm will not change annually, as a conversion to this operating system is expensive and the marketing of the products has to be established. A change is therefore expensive and one can be sure that these measures will be applied over a longer period of time. Measures in connection with animal stocking in grazing livestock could also be suitable for implementation as an annual measure, as these measures are also not very susceptible to short-term adjustments. The same applies to the promotion of measures for landscape features. These are partially protected by law.

- (3) Measures providing its full effect only after several years; however, the measures could be designed in a way to make a multi-annual implementation likely

These could be, for example, measures such as multi-annual flowering strips, the costs of which are spread over several years. It would also be conceivable, but administratively more difficult, to implement higher subsidy rates if the same measures were implemented on the land as in the previous year.

- (4) Measures that are not suitable for an implementation via eco-schemes due to either late information of authorities creating either large windfall profits are making on-spot checks infeasible

Measurements such as tilling and rolling are normally be carried out well before 15th May. This means that they have to be carried out before the farmer's agricultural application has informed the administration of their implementation. This makes the measure uncontrollable for the administration and deadweight effects are very likely. Also in cases when a support measures addresses issues, that require the control of a biological or physical process with a significant time delay (e.g. reducing soil nutrient levels, abandonment of herbicides) are not suitable for Eco-Schemes. We briefly present the argumentation for nutrient management options: First, to achieve a reasonable impact, in most cases the nutrient input must be reduced for a couple of years, as the soil can buffer annually changes to some degree in particular in relation to phosphorous and potassium. However, the farmer can opt in and out on a yearly base. Second, given the current German data-infrastructure for nutrient data, on-the-spot checks are necessary, inducing high administrative costs. Third, these checks cannot focus on differences in vegetation biomass and composition as these would hardly be affected by a one year change in fertilization, so chemical analysis are needed, increasing the control costs even further

- (5) Measures that are suitable, however not covered by the regulation

The Eco-Scheme is an area-related payment only. However, in certain cases using animals heads would be a much more straight-forward to address, environmental issues or other public goods as animal welfare. E.g. for a grazing payment it might be more sensible to link the payment to the number of grazing animals instead to the grazed area. In particular for addressing animal welfare issues in granivore production the link to animal welfare would be strongly preferable to an area payment. In granivore production, animal numbers are frequently decoupled from the area and consequently one faces a huge degree of inter farm variation in stocking rates. In addition granivore production is characterized by a large variation of the animal numbers across time negatively influencing the implementation of animal related payments in the second pillar with multi-annual contracts.

4.3 Challenges associated with the political decision-making process

Regionally differentiated funding amounts:

The measures of the Eco-Schemes should, as far as possible, be attractive for agricultural holdings in all German Länder. From the point of view of the Länder, the Eco Schemes should not lead to a significant redistribution of funds under the first pillar between the Länder. This condition represents a challenge for any target-oriented design of the Eco-Schemes. If one chooses a system in which the agricultural enterprises are free to decide on the extent of the implementation of the measures, the quantity of the implementation of the measures, in the case of a nationwide uniform Eco-Scheme payment, will differ depending on the opportunity costs. The consequence will be a regional redistribution of payments. This redistribution can only be counteracted by differentiating the Eco-Scheme payment according to local parameters. If this differentiation is not made, individual Länder will feel "disadvantaged", as "their" agricultural farms may not have the same opportunities to generate income with the Eco-Schemes as the farms in other Länder. Differentiated payment levels will

however increase the administrative workload and complicate in particular the planning and reporting given the prescriptions set out for the strategic plan and the performance monitoring framework.³

Risk of frequent readjustments

From the respondents' point of view, new measures often require time to establish themselves in practice as both the administration and the farmers must learn to handle the measure. Some of the respondents see a greater risk that the measures, which in principle take one year to implement, will be permanently adjusted. If measures are permanently readjusted, the effort for the administrations is considerably increased and, in the opinion of the administration, can easily lead to confusion and, consequently, errors. However, most of the interviewees consider the risk of permanent adjustments to be rather low, as the Eco-Schemes will require coordination between the Federal Government and the Länder.

4.4 Interdependency between CAP and budgeting rules

The effectiveness of the 'Green architecture' does not only depend on the layout of the CAP but also on the availability of funds and the corresponding budgeting rules. Thus, the political frameworks such as the design of the MFF 2021-2027 will be just as important as further clarification of the upcoming implementation of result-oriented budget schemes or the results of ongoing Fitness Check for the State aid framework for the period 2021 to 2028 (COM(2017) 2039310). As the eco-schemes are part of the first pillar, the respective design and budget allocation will be determined in Germany on the federal level. However, the conditions for agriculture and its intensity vary significantly across Germany. If a homogenous set of measures and support payments is implemented across Germany, the before mentioned heterogeneity will lead to an unequal adoption by farmers, and in consequence to a redistribution of first pillar funds among farmers and federal states. Eco-schemes could be designed in a way to limit the redistributive effect. However, this will come at the expense of a lower effectiveness of the scheme and / or a more complicated interplay with the second pillar funding.

5 Conclusion

If one wants to answer the question of whether Eco-Schemes are a golden bullet or an unnecessary gadget for a federal state, there are many interactions and dependencies that must first be understood. Eco-schemes offer a great opportunity to address agri-environmental concerns better and more effectively and to make the first pillar of the CAP more result-oriented. However, given the coordinative challenges and the timeframe there is a real danger that Eco-Schemes will become an ineffective instrument similar to greening. In fact, the basis on which the Eco-Schemes are to be designed must first be clarified: This basis includes: the definition of the budget, the clarification of content specifications (Eco-Schemes, Conditionality, AECM), but also the structure of the sanction and control system and the monitoring and evaluation system. Since the evaluation of individual instruments depends on these specifications, and there is a very intensive interaction between the components (they build on each other in terms of content and legal design), sequential work under time pressure,

³ The framework demands a differentiated planning and reporting of output and result-indicators for each uniform payment value.

instead of parallel work, is advisable. With regard to the challenge of finding agri-environmental measures that are also suitable as one-year measures, we have made suggestions in the following categories: (1) Measures providing a benefit even with a one-year implementation only; like crop diversity, (2) Measures providing its full effect only after several years; however, the nature of the measure makes a multi-annual implementation by farmers likely; like organic farming measures, (3) Measures providing its full effect only after several years; however, the measures could be designed in a way to make a multi-annual implementation likely; like multi-annual flowering strips (4) Measures that are not suitable for an implementation via eco-schemes due to either late information of authorities creating either large windfall profits are making on-spot checks infeasible and (5) Measures that are suitable, however not covered by the regulation like animal welfare measures.

As additional challenges, we have outlined how considerable financial redistribution debates are being conducted in Germany at both the content and the regional level. The measures of the Eco-Schemes should, as far as possible, be attractive for farms in all German Länder. From the point of view of the Länder, the Eco Schemes should not lead to a significant redistribution of funds under the first pillar between the Länder. This political condition represents a challenge for any target-oriented design of the Eco-Schemes. If one chooses a system in which the agricultural enterprises are free to decide on the extent of the implementation of the measures, the quantity of the implementation of the measures, in the case of a nationwide Eco-Scheme payment, will differ depending on the opportunity costs. The consequence will be a regional redistribution of payments. This redistribution can only be counteracted by differentiating the Eco-Scheme payment according to local parameters. If this differentiation is not made, individual Länder will feel "disadvantaged", as "their" agricultural farms may not have the same opportunities to generate income with the Eco-Schemes as the farms in neighbouring Länder. In addition, the appropriate measures can often no longer be used due to the prohibition of double funding for the AECM (this applies in particular to grassland measures when selecting the Eco-Schemes measures). A common budget share for AECM and Eco-Scheme could therefore be more appropriate for federal countries. This would allow Member States to decide how to tackle a problem with regard to the environmental needs.

In order to take advantage of the opportunities offered by Eco-Schemes, and therefore actually make it a golden bullet instead of an unnecessary gadget, it is essential to adapt the monitoring and evaluation system. AECM and Eco-Schemes continue to be two completely different support systems. Different measures on the same areas may still have to be controlled at different times. This leads to considerable administrative efforts and costs. As a result, the administrative costs could be too high to take advantage of the opportunities offered by Eco-Schemes.

6 Literature

- Birkenstock M, Röder N (2018) Gestaltung und Umsetzung der EU-Gemeinsamen Agrarpolitik ab 2021: Übersicht über die politischen Debatten, hg. v. Umweltbundesamt. UBA-Texte
- BMEL (2019) Erarbeitung eines nationalen GAP-Strategieplans: Runder Tisch beim DBV „Umweltleistungen im Rahmen der GAP nach 2020“ (Vortrag: Dr. Wolfgang Löhe). Berlin
- COM(2018) 392 final Proposal for a regulation of the European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EU) No 1305/2013 of the European Parliament and of the Council and Regulation (EU) No 1307/2013 of the European Parliament and of the Council, COM(2018) 392 final
- COM(2018) 393 final Proposal for a regulation of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013, COM(2018) 393 final
- COM(2018) 394 final Proposal for a regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products, (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union and (EU) No 229/2013 laying down specific measures for agriculture in favour of the smaller Aegean islands, COM(2018) 394 final
- Destatis [Statistisches Bundesamt] (2018) Land- und Forstwirtschaft, Fischerei: Landwirtschaftliche Bodennutzung Anbau auf dem Ackerland (Vorbericht)
- Dierking U, Neumann H, Beckmann S, Metzner J (2017) Gemeinwohlprämie - Umweltleistungen der Landwirtschaft einen Preis geben: Konzept für eine zukunftsfähige Honorierung wirksamer Biodiversitäts-, Klima-, und Wasserschutzleistungen in der Gemeinsamen EU-Agrarpolitik (GAP), hg. v. Deutscher Verband für Landschaftspflege e.V., 2. korrigierte Auflage
- ECA [European Court of Auditors] (2017) Greening: a more complex income support scheme, not yet environmentally effective, 75 p [zitiert am 19.12.2017]
- Evaluation of the instruments applicable to State aid in the agricultural and forestry sectors and in rural areas, COM(2017) 2039310, COM(2017) 2039310
- Fährmann B, Grajewski R (2018) Will the future CAP lead to less implementation costs and higher impacts of Rural Development Programmes?: Paper prepared for presentation for the 162nd EAAE Seminar The evaluation of new CAP instruments: Lessons learned and the road ahead
- Hart K, Mottershead D, Tucker G, Underwood E, Maréchal A, Menet L, Martin I, Dayde C, Bresson C, Deniel E, Sanders J, Röder N, Osterburg B, Klages S (2017) Evaluation study of the payment for agricultural practices beneficial for the climate and the environment: Final Report, hg. v. European Commission, Alliance Environnement in collaboration with the Thünen Institute, 266 p [zitiert am 15.1.2018]

- Matthews A (2019) Introducing a Development Policy Perspective into CAP Strategic Plans: TEP Working Paper No. 0319. Trinity Economics Paper
- Pe'er G, Dicks LV, Visconti P, Arlettaz R, Báldi A, Benton TG, Collins S, Dieterich M, Gregory RD, Hartig F, Henle K, Hobson PR, Kleijn D, Neumann RK, Robijns T, Schmidt J, Schwartz A, Sutherland WJ, Turbé A, Wulf F, Scott AV (2014) Agriculture policy. EU agricultural reform fails on biodiversity. *Science* 344(6188):1090-1092. doi: 10.1126/science.1253425
- Röder N, Ackermann A, Baum S, Birkenstock M, Dehler M, Ledermüller S, Nitsch H, Pabst H, Rudolph S, Schmidt M, Schmidt T (2018) Evaluierung der GAP-Reform aus Sicht des Umweltschutzes - GAPEval (in preparation), hg. v. Umweltbundesamt, Thünen-Institut für Ländliche Räume
- Schoof N, Luick R, Ackermann A, Baum S, Böhner H, Röder N, Rudolph S, Schmidt T, Beaufoy G, Jones G, Einarsson P, Ruiz J, Stefanova V, Fuchs D, Windmaißer T, Hötcker H, Jeromin H, Nickel H, Ukhanova M (eds) (2018) Auswirkungen der neuen Rahmenbedingungen der Gemeinsamen Agrarpolitik auf die Grünland-bezogene Biodiversität. Bonn-Bad Godesberg. BfN-Skripte