

The German Agricultural Sector under the Impact of the CAP Reform: Objectives of the National Strategic Plan

ANA-CRISTINA BĂLGĂR, PhD.
Institute for World Economy, Romanian Academy
ROMANIA
anacristinabalgarg@gmail.com

Abstract: The Common Agricultural Policy (CAP) represents the core of EU strategy to develop the rural sector and to support the European farmers. This long reformed policy has shifted over the years to better adapt to undergoing challenges and new priorities of EU's rural space, evolving from granting direct support for production to a policy that encourages the European farmers to adopt climate friendly agricultural policies. After a brief review of the stages completed by the last reform of the CAP, this article sets out to analyse the objectives of the recently-adopted CAP, the innovative elements introduced, as well as the way in which the new approach will contribute to the achievement of the environmental protection and climate change goals, using as an example a relevant case study – the impact of these reforms and new regulations in Germany. In the second part of the analysis, we will highlight the potential implications of the CAP green architecture on the German agricultural sector, given the particularities of the federal structure and pointing out at the same time several relevant indicators – the evolution of direct payments (DP), of eco-schemes and of market measures.

Key-Words: Common Agricultural Policy (CAP), Germany, greening agriculture, national strategic plan

JEL Classification: Q00, Q01, Q15, Q18

1 The post-2020 Common Agricultural Policy: objectives, stages, and innovation

Founded around six decades ago to increase productivity in agriculture and ensure a fair standard of living for farmers, the Common Agricultural Policy (CAP) periodically extended its objectives, focusing, gradually, on farmers, on production and consumers, and, most recently, on the transformation of agriculture into a support mechanism for human health and environmental protection.

In the context of the more recent international commitments assumed by the European Union (EU) with respect to the mitigation of climate change (COP21) and the achievement of the sustainable development goals (SDGs) included in the UN 2030 Agenda, as well as against the background of the geopolitical developments of the last few years, which contributed to an increased degree of uncertainty on the agricultural markets¹, it became evident that the changes brought by the last reform of the Common Agricultural Policy – in 2013 – were insufficient to be able to adequately respond to all these challenges.

In these circumstances, because the modernisation of the EU agricultural policy was an imperative for ensuring the transition towards a more sustainable agriculture and for the development of dynamic rural areas, capable of providing safe and high-quality products at competitive prices, in 2017, the European Commission (EC) initiated ample public consultations with the stakeholders, based on which to be able to materialise the commitments of adapting and simplifying the CAP in line with the new environmental and climate ambitions. Without representing a predetermination of the CAP budget allocations for the next multiannual financial framework (MFF), the consultation process focused on outlining the future policy priorities, both as a result of a retrospective assessment of the previous performances in the field, and based on the opinions and recommendations expressed via the REFIT² platform (European Commission, 2018a).

¹ Among the recent events that caused disturbances on the EU agricultural market were: the United Kingdom's announced withdrawal from the EU, the tensions that occurred within the traditional EU-US partnership between the Donald Trump administration, etc.

² The Regulatory Fitness and Performance Programme (REFIT) and the related platform were launched in 2015 to assist the European Commission in increasing the effectiveness of EU regulations, simplifying the legislation, and reducing

The results of these analyses formed the basis for the drawing up of the *Communication on the future of food and farming*, a document in which the European Commission set out, in November 2017, the main challenges and objectives that must be taken into account by a Common Agricultural Policy adapted to the future enhanced responsibilities and requirements, outlining at the same time the lines of action that could facilitate the transition towards a more sustainable agriculture (European Commission, 2017).

Against the background described, at the start of the budget programming stage for the period 2021-2027, which took place in June 2018, the EC presented a series of legislative proposals on the functioning of the CAP after 2020³ which, on the one hand, comprised a series of clear commitments and more ambitious objectives related to the environment, climate change and sustainability, and, on the other hand, introduced a new method of implementation – the national strategic plans (NSPs – Box 1) –, with an essential role in making the EU agricultural policy simpler and more flexible (Matthews, 2018a).

Box 1: Actions needed for the implementation of the NSPs

At EU level	At individual MS level
<ul style="list-style-type: none"> ✓ Adoption of a unique set of objectives designating the CAP desired “targets” for farmers, citizens and/or for combatting climate change, etc.; 	<ul style="list-style-type: none"> ⇒ In-depth analysis of the specific individual needs, which will determine: <i>a)</i> the proposals on how to direct the funds to both CAP pillars, so as to best contribute to meeting the needs referred to, in accordance with the general EU objectives; <i>b)</i> the tools to be used; <i>c)</i> the country’s own national objectives;
<ul style="list-style-type: none"> ✓ Establishment of the general framework of measures available to the Member States, based on which the latter could use the allocated amounts; then, each MS should be able to select (or adjust in accordance with its specific needs) the measures it considers effective for meeting individual needs; 	<ul style="list-style-type: none"> ⇒ Approval by the European Commission of each national strategic plan regarding the CAP, after checking its compliance with the general EU objectives and checking whether the “common” nature of the agricultural policy and the level playing field conditions are maintained;
<ul style="list-style-type: none"> ✓ Establishment of a common set of result indicators that could help ensure and guarantee a level playing field in the evaluation of the effectiveness of the measures used. 	<ul style="list-style-type: none"> ⇒ Annual reporting to the European Commission on the performances obtained and presentation of the progress made for the achievement of the objectives established, based on specific result indicators. After reviewing the performance report, the European Commission may request any future action it considers adequate.

Source: Author’s synthesis based on the documents published by the European Commission (European Commission, 2018b).

Although the new initiative introduced by the MFF 2020-2027 on making the CAP more flexible – based on the preparation by each Member State (MS) of its own strategic plan enabling it to adapt the CAP tools to the specific individual needs and priorities – an initiative agreed upon within the Agriculture and Fisheries Council (AGRIFISH from December 2018), the ministers for agriculture from the EU countries pointed out the contribution of the strategic planning model to the increase of national accountability in particular since the results obtained by each country will be indissolubly correlated with how these NSPs are prepared and implemented. It is worth mentioning that the proposal was still met with a certain degree of reserve by the members of the European Parliament (EP), who were somewhat sceptical about the innovative formula that meant direct negotiations between the European Commission and the Member States for setting out the objectives under the CAP Pillar I, considering that this could lead to a limitation of the Parliament’s competence in this field (Bourget, 2021). As a consequence, despite the measures taken by the EC with the aim of rapidly commencing trilateral negotiations – in order for the proposal to be adopted before the European elections scheduled for May 2019 –

administrative formalities and other constraints, without undermining the common policy priorities and the achievement of the set objectives.

³ These proposals were initially set to begin being implemented on 1 January 2021, and, in accordance with the notification by the United Kingdom of its intention to withdraw from the EU, were designed for a Union of 27 Member States.

the EU Council (CONS) and the European Parliament requested that the negotiations be postponed until after the European elections and, thus, after the appointment of a new EU executive⁴.

Given the context shown, a particularly relevant moment for the preparation of the future CAP was year 2019 when, after being voted in the European Parliament, the new European Commission – led by Ursula von der Leyen – was appointed in November and named as primordial actions of the new mandate: *a)* the strengthening of the efforts for combating climate change; and *b)* the fostering of a sustainable environment; these were considered to be fundamental endeavours for the transformation of the European economy and society with a view to achieving climate neutrality by 2050.

In these circumstances, in December 2019, the EC presented the *Communication on the European Green Deal*, a flagship proposal that launched a new sustainable and inclusive growth strategy, with a larger scope that transcended climate and environmental aspects, by approaching issues of major importance for agriculture and the rural areas. As such, the Green Deal brought argued in support of the role of organic farming in the management of the transition towards a more sustainable food system, stressing at the same time the need to consolidate the efforts made by farmers and by the agricultural community as a whole to achieve the objectives related to climate change, environmental protection and the preservation of biodiversity.

As a consequence, under the Green Deal umbrella, in 2020, the European Commission published two related documents that comprised a series of concrete actions intended for a better harmonisation of agricultural and food production – along the entire supply chains, from producer to consumer – with the environmental protection measures, facilitating the creation of sustainable food systems: the strategies entitled *From farm to fork* and *Biodiversity 2030* (Box 2).

Box 2: Objectives of the Green Deal related strategies, with relevance for the CAP

Recommendations of the strategies *From farm to fork* and *Biodiversity 2030* for ensuring the contribution of agriculture to the reduction by at least 55% of the net GHG emissions by 2030:

- The 50% reduction of the use of harmful chemical pesticides in agricultural production activities, as well as of antibiotics in the animal rearing sector;
- The reduction by at least 50% of nutrient losses (e.g. nitrogen and phosphorus) to avoid the deterioration of soil fertility, thus contributing to the reduction by at least 20% of the use of synthetic fertilisers in agriculture;
- The reduction by around 50% of the use of active (low-risk) antimicrobial substances in animal rearing and aquaculture;
- The use of around 25% of all agricultural land for organic production and the increase of the share of organic aquaculture;
- The withdrawal from the production circuit of around 10% of all agricultural land, to ensure better environmental protection and preserve biodiversity
- The coverage of approximately 100% of EU rural areas by broadband networks ensuring rapid internet connection (by 2025).

Source: Author's synthetic adaptation based on Matthews (2021).

The launch of the two strategies was met with reluctance by the European agricultural community, whose representatives argued, on the one hand, that the objectives related to the actions for increased environmental protection should be supported by a series of measures providing the farmers with the financial means needed to be able to achieve them, and, on the other hand, that the “target” related to the reservation of a share of 25% of all agricultural land for organic production could lead to the rapid market saturation for certain goods, as organic products have higher costs than conventional ones (Bourget, 2021).

At the same time, the disturbances caused by the negative effects of the Covid-19 pandemic on the agricultural markets of Member States in the first months of 2020 fuelled certain reluctances of the European executive which, in a first stage, had a hesitant position as to whether to pursue a “renewal” or “survival” strategy with respect to the Common Agricultural Policy (Metta & Lakner, 2021). Later on, however, the European Commission returned to its initial position, concluding that the proposal regarding the CAP reform was in line with the environmental ambitions of the European Green Deal and of the related strategies (European Commission, 2020a). Nevertheless, as shown by the results of an agricultural policy analysis – prepared at the request of the *Committee for agriculture and rural development (AGRI)* of the European Parliament (Guyomard,

⁴ Because the negotiations were only launched in 2020, the implementation of the new CAP was, at first, postponed for one year, namely for 2022 (from 2021, when it was initially scheduled to start).

et al., 2020) –, major revisions of the proposed regulation (of June 2018) on to the CAP restructuring were required to ensure its full compatibility with the Green Deal objectives.

In these conditions, because the CAP reform could not be completed before the beginning of the programming period 2021-2027, to avoid the absence of financing for the European farmers, the MEPs and the Member States requested another extension of the transition period for the temporary measures laid down by the previous rules. As a result, the entry into force of the post-2020 CAP was again postponed (until 2023), and the policy was to be applied for a period of only five years of the current financial programming framework.

To better align the new Common Agricultural Policy with the Green Deal provisions, the European Commission requested the EU co-legislators to maintain the essential provisions comprised in the *Regulation on the CAP strategic plans*, namely: *a)* setting out more ambitious objectives concerning the actions intended for environmental protection and for fighting climate change compared to the previous programming period (the *no backsliding* principle); *b)* strengthening the conditionality system⁵; *c)* maintaining the mandatory nature of eco-schemes⁶ in the national strategic plans; *d)* ensuring the allocation of a limit of at least 30% of the Pillar II expenses to environmental measures; *e)* improving the data collection criteria, and *f)* drawing up specific provisions seeking to consolidate the farmers' position within value chains. Beyond these aspects, the EC also requested the European Parliament and the EU Council to amend the text of the legislative draft by introducing additional clauses regarding: *g)* pre-allocation for eco-schemes; *h)* additional indications regarding the practices eligible for financing under eco-schemes; and *i)* the integration in the CAP of certain legislative aspects related to animal welfare and the use of antibiotics in the animal rearing sector.

Later, in October 2020, both the Council of agriculture ministers from the Member States, and the European Parliament drew up their own plans regarding the future agricultural policy. From among the differences between the two legislative proposals, it is important to mention the one regarding the minimum percentage of Direct Payments (DP) required to be allocated to environmental programmes (eco-schemes) in the Member States' NSPs. As such, while the EP provided for a mandatory share of 30% of “green” regulations in the CAP Pillar I (in line with the EC proposal), the EU Council stipulated a threshold of minimum 20% for this purpose. Also, the two European institutions were on divergent positions with respect to the margin available to Member States in relation to the establishment of a cap or of a regressive nature of direct payments per farm⁷.

As a result, by means of a fact sheet published in November 2020 (European Commission, 2020b), the European Commission demonstrated the ways in which these conflicting vision risked endangering the achievement of the European Green Deal objectives – by undermining the efforts made for the preparation and implementation of a fairer and more environmentally friendly agricultural policy, intended for the development of rural areas–, launching at the same time an invitation to a triologue between the parties to reach a common position on the CAP reform package.

After a long period of trilateral negotiations, in June 2021, the European Commission, the Parliament and the EU Council reached a consensus with respect to the adoption of a reformed common policy for the period 2023-2027, deciding on an agreement for each of the points left unresolved on the CAP debate agenda⁸. The three draft regulations agreed upon on this occasion cover aspects related to the national strategic plans, the organisation of agricultural markets, as well as to CAP financing, managing and monitoring (Box3).

Box 3: Synthesis on the conclusion of the institutional triologue in the final stage of the CAP reform

⁵ The full receipt of CAP support, subject to the beneficiaries' compliance with the basic standards related to the environment, climate change, etc.

⁶ Environment and climate schemes will be financed from the Member States' direct payment budgets (under the CAP Pillar I), to support the transition towards a more sustainable agriculture. As such, Member States must make available to farmers one or more eco-schemes, but participation in accessing them will be voluntary (mandatory for Member States, but voluntary for farmers).

⁷ In accordance with the European Commission recommendations, the EP stipulated the Member States' obligation to set a cap on the payments, while CONS opposed this provision.

⁸ Namely, with respect to: minimum DP budget for eco-schemes and the establishment of a transition period for Member States, the minimum mandatory level of internal convergence for DPs, enhanced distribution of DPs, etc.

Common position of the European Commission, European Parliament and EU Council with regard to the Union's future agricultural policy

- The consolidation of eco-conditionality, by enhancing the requirements included in the *Good Agricultural and Environmental Conditions* (GAEC) and the *Statutory Management Requirements* (SMR): the obligation to ensure crop rotation in farms with an agricultural area larger than 10 hectares (with the exception of those where pastures are predominant or of those engaged in organic farming), the obligation to allocate at least 4% of the total agricultural land to non-productive areas of environmental interest (this threshold was set at 3% for farms with large areas dedicated to nitrogen-fixing crops);
- The allocation by the Member States of at least 25% of the budget dedicated to income support (direct payments) to programmes intended for environmentally friendly agricultural practices (eco-schemes). This share represents the final compromise reached during the negotiations between the European Parliament and the EU Council, the parties also establishing an adaptation period of two years (2023-2024), during which these contributions may be lower than the limit mentioned;
- The distribution of a share of at least 35% of the total funds to the CAP Pillar II (rural development), for commitments and practices favourable for the environment, climate and animal welfare (compared to 30%, the ceiling established so far);
- The changing of the mechanisms for the redistribution of basic payments (redistributive payments): these will become mandatory for all Member States and will represent at least 10% of all direct payments.

Source: Author's synthesis based on the European Commission (2021c).

Nevertheless, according to certain EU analysts (Koksal, 2021; Nano & Capaldi, 2021), the majority of the policy measures provided for by the new CAP reform – set out based on the agreement concluded between the co-legislators in June this year – have a low potential for mitigating climate change, since they do not encourage the use of effective green practices. Although some of the new initiatives seek to increase the sustainability of EU agriculture (e.g., the eco-schemes), the budget allocated to them does not meet the stringent need to counteract the effects of the ongoing climate crisis and the need to transform the EU agricultural system into a more sustainable one. Also, the outcome of the trilogue – which, to the largest extent, reflects the position of the EU Council – does not include legally binding environmental objectives, in accordance with the provisions established in the European Green Deal and its related strategies.

2 Particularities of the German agricultural sector

2.1. Challenges related to environmental protection and the combatting of climate change

The protection of biodiversity is key for the proper functioning of the agricultural sector, representing a complex and overarching responsibility, one that requires the adoption of efficient and well-targeted measures. Nevertheless, Germany repeatedly postponed the application of the Directive on natural habitats, determining the European Commission to trigger – as early as 2015 – an infringement procedure for the failure of meeting national obligations undertaken in relation to the conservation of natural habitats and the protection of species of wild fauna and flora (European Commission, 2020c). Pursuant to Directive 92/43/EEC of the EU Council (of 1992), Germany had the obligation to designate special conservation areas, to set specific objectives for each of them, and to draw up measures aimed at maintaining an appropriate level of protection of natural species and habitats. As the deadline for the completion of these stages for all sites existing on the country's territory expired (in some cases, even as early as 2005), in 2015, the EC sent Germany a first letter giving notice of the country's delay in transposing the requirements of EU rules in the relevant national legislation. After a period of around four years of bilateral negotiations, in 2019, the European Commission sent an additional notice, stating that both at land level, and at national level no detailed and quantifiable objectives had been set for the around 4,600 sites included in the European network of protected areas (Natura 2000), which damaged the efficiency of the conservation measures adopted. Because the German authorities did not reply accordingly by taking appropriate steps within the time limit granted, at the beginning of 2021, the EC notified the Court of Justice of the European Union in relation to this case (European Commission, 2021d). In this context, as shown by the results of a preliminary analysis made by the *German consortium for the protection, conservation and regeneration of the natural environment at land level*, the annual expenses needed for the proper implementation of the European directives on environmental conservation would amount to around EUR 1.4 billion, with an estimated duration of around two and a half decades (Federal Agency for Nature Conservation - BNF, 2021).

As regards greenhouse gases, as a result of the good agricultural practices applied, of the reduced use of nitrogen-based fertilisers and of the optimum management of natural fertilisers, German agriculture is not

emission-intensive: 7.6% of the total in 2019, compared to around 10% in 1990 (German Environment Agency, 2021). Although in absolute terms GHG emissions show a downward trend on the long term, this reduction is slower in the agricultural sector compared to the other sectors of the economy. To achieve the objectives of maintaining a minimum level of GHG concentrations in the atmosphere, German authorities are promoting a series of measures, among which: a) the drainage of wetlands; b) re-humidification activities to mitigate the emissions from peatlands (organic soils) used as arable land, which store high amounts of carbon; c) encouraging and supporting organic farming; as well as d) the use of crops with a high capacity for fixing nitrogen in the soil (Metta & Lakner, 2021).

Also, as a result of the structural changes applied, of the reduction of livestock in farms located in eastern Germany, as well as of the improved efficiency of fertilisers, a gradual reduction of the use of inorganic nitrogen-based nutrients was seen during the recent years. Nevertheless, although the nitrogen surplus diminished from 141 kg/ha in 1990, to 89 de kg/ha in 2019, the threshold of 70 kg N/ha provided for in the sustainability strategy has not been reached so far (Federal Ministry of Food and Agriculture, 2020).

2.2. Allocation of CAP funds by intervention type within the 2014-2020 multiannual framework

As shown by statistical data published by the European Commission (2021a,b), the largest shares of expenses related to CAP Pillar I in Germany in the 2014-2020 multiannual framework was directed towards direct payments (Table 1), which, during the entire reference interval were above the EU average (Graph 1).

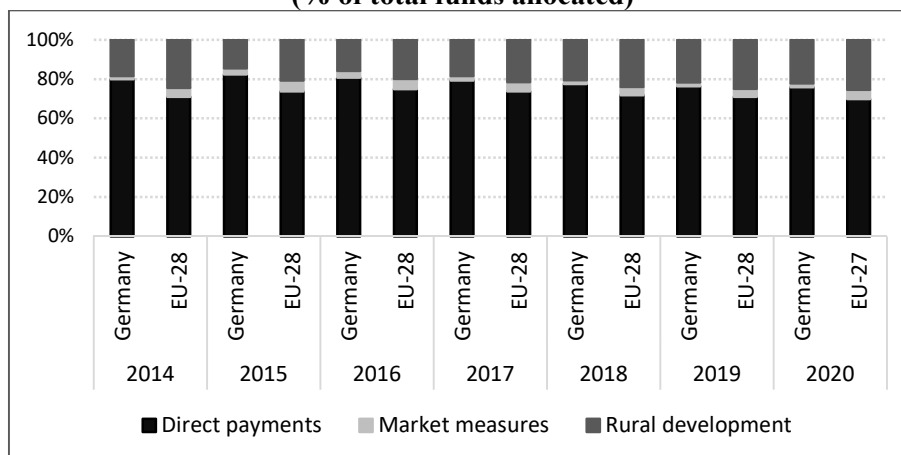
Table 1: Allocation by types of measures of CAP-related expenses in Germany, 2014-2020

Year	Direct Payments ¹⁾		Market measures		Rural development programmes		Annual total
	EUR mil.	% of total	EUR mil.	% of total	EUR mil.	% of total	EUR mil.
2014	5,139.9	79.9	110.4	1.7	1,184.4	18.4	6,434.7
2015	4,875.1	82.3	186.5	3.1	865.0	14.6	5,926.6
2016	4,846.6	80.8	201.5	3.4	951.0	15.8	5,999.1
2017	4,815.1	79.2	145.1	2.4	1,117.7	18.4	6,077.9
2018	4,794.3	77.5	115.6	1.9	1,274.1	20.6	6,184.0
2019	4,768.1	76.4	117.3	1.9	1,355.9	21.7	6,241.3
2020	4,768.1	75.9	117.2	1.9	1,394.6	22.2	6,279.9

Notes: ¹⁾ In total amount, i.e., the values presented include both refunds to final beneficiaries in accordance with financial discipline, and other types of direct aid granted.

Source: Author's calculations based on data published by the European Commission (2021a,b): (a) Directorate-General for Agriculture and Rural Development – Agri-food Data Portal, *Financing the CAP*, <https://agridata.ec.europa.eu/> (for the period 2014-2019); (b) Directorate-General for Communication, *EU country factsheets*, https://ec.europa.eu/info/food-farming-fisheries/farming/facts-and-figures/performance-agricultural-policy/agriculture-country/eu-country-factsheets-0_en (for year 2020).

Graph 1: Distribution of CAP-related expenses in Germany compared to the EU-28/27* average, in the period 2014-2020 (% of total funds allocated)



Note: *Because the United Kingdom left the EU on 31 January 2020, for 2020, the analysis covers the 27 states that are currently EU Member States.

Source: Author's calculations based on data published by the European Commission (2021a,b).

At the same time, during 2015-2019, the largest financial flows of Direct Payments (61.6% annually, on average) were allocated for basic support schemes while DP allocated for climate and environmentally friendly agricultural practices (the “green” Direct Payments) respected the mandatory 30% of the total. As such, in 2019 (the last year for which there are statistical records), the financing of basic payment schemes (BPS) in Germany amounted to around EUR 2.9 billion, and “green” DPs totalled approximately EUR 1.4 billion (Table 2). A share of around 7% of the total expenses (an amount of EUR 328 million in 2019) was used to finance redistributive measures, while allocations for the support of small and young farmers totalled approximately EUR 91 million the same year.

Table 2: Distribution of Direct Payment expenses for the main support schemes financed in Germany in the period 2015-2019*

Application year	DIRECT PAYMENTS ¹⁾									
	Basic payments		Direct “green” Payments		Payments for young farmers		Redistributive payments		Payments for small farms	
	EUR mil.	% of total	EUR mil.	% of total	EUR mil.	% of total	EUR mil.	% of total	EUR mil.	% of total
2015	2,983.3	62.0	1,437.5	29.9	36.1	0.7	334.3	6.9	24.3	0.5
2016	2,953.3	61.7	1,431.8	29.9	45.8	1.0	333.3	7.0	22.0	0.4
2017	2,932.9	61.6	1,422.3	29.9	50.3	1.1	331.3	7.0	20.5	0.4
2018	2,906.5	61.3	1,414.4	29.9	65.4	1.4	329.8	7.0	19.1	0.4
2019	2,881.9	61.2	1,407.5	29.9	72.9	1.5	328.1	7.0	18.0	0.4

Notes: * Latest available data on the date of this analysis;

¹⁾ The values presented only comprise decoupled direct payments (excluding refunds to final beneficiaries in accordance with financial discipline or other types of direct aid granted);

Source: Data published by the European Commission (2021a).

As regards the rural development component (RD) included in the CAP Pillar II – which benefits also from co-financing from national sources –, from the ceiling of around EUR 1.4 billion allocated to Germany from the EU budget (under the EAFRD funds), in 2019, around EUR 715 million were used for investments intended for the improvement of environmental conditions and the combatting of climate change⁹, out of which around EUR 226 million came from direct transfers from Pillar I¹⁰ (Table 3).

Table 3: Germany’s options regarding transfers between the CAP pillars, in the 2014-2020 MFF

	2015	2016	2017	2018	2019	Total
EUR mil.	231.5	230.0	228.4	227.1	225.8	1,142.8
Transfer from Pillar I (%)	4.5	4.5	4.5	4.5	6.0	-
Transfer from Pillar II (%)	19.7	19.6	19.5	19.4	19.3	

Source: Author, based on European Parliament (2015).

Also, the value of the payments granted in 2019 to the farmers in mountain areas and in regions facing natural constraints reached around EUR 239 million (Metta & Lakner, 2021).

2.3. Implications of the post-2022 CAP green architecture for the German agricultural sector

In accordance with the European Commission proposal, the future Common Agricultural Policy will maintain its traditional structure consisting of two pillars, as follows i) *under Pillar I*, farmers will continue to receive annual Direct Payments subject to complying to certain new environmental regulations and standards imposed by the European Agricultural Guarantee Fund (EAGF); and ii) *under Pillar II*, the EAFRD will continue to serve as flexible multiannual instrument for the financing of voluntary rural development actions, including certain climate-relevant measures (European Parliament, 2018).

⁹ In accordance with the EU provisions for the 2014-2020 multiannual financial framework, a share of at least 30% of the EAFRD funds should have been allocated to agri-environment and climate measures.

¹⁰ Inter-pillar flexibility represents an optional transfer of funds between direct payments and rural development. Although it had been established initially that Member States can resort to such transfers in the period 2014-2019, to guarantee the maintenance of the national strategies, the European Parliament and the EU Council decided to extend the inter-allocation flexibility for the calendar year 2020 (respectively, the 2021 financial year).

As we have already mentioned, the basic principle of the new CAP is an enhanced transfer of responsibilities to the Member States, which will benefit from more flexibility and subsidiarity in designing the interventions, through a new model based on performances and results (Matthews, 2018b). As such, if the general CAP objectives, the types of interventions and related basic requirements will be established at EU level¹¹, Member States will have responsibilities related to the implementation process, such as: decisions on their own set of measures under Pillars I and II, the drawing up of specific conditions under the NSPs, which will then be subject to approval by the European Commission, etc. The new “green” architecture of the future CAP consists of: *a*) consolidating the conditionality system, as well as the inclusion of additional rules in climate and environment schemes, the so-called eco-schemes (Pillar I); *b*) maintaining the voluntary payment schemes for agri-environment climate measures (AECM) (Pillar II).

2.3.1 Consolidation of the eco-conditionality system

The main objective of the conditionality system is to ensure that farmers comply with a minimum level in terms of the environmental regulations to be able to benefit from direct support. To help enhance the requirements beyond the pre-existing requirements related to environmental protection and the combating of climate change (laid down by the GAEC standards and the SMR requirements), the new CAP brings, on the one hand, a series of supplementations for three of the provisions included in the *Good Agricultural Conditions*¹² (Annex 1) and, on the other hand, introduces new requirements¹³ and extended provision in accordance with the EU Water Framework Directive and with the Directive on the sustainable use of pesticides.

As such, the proposal for the regulation of national strategic plans within the CAP comprises a total of 10 good agricultural practice standards related to: climate (GAEC 1-3), water and soil quality (GAEC 4-8) and biodiversity (GAEC 9-10).

Also, the GAEC standards and SMR requirements – aiming at establishing a common set of fair rules at EU level concerning environmentally friendly agricultural practices – are particularly relevant in the conditions in which, after 2023, Member States will be able to add their own regulations in their national strategic plans. As a result, if environmental and climate rules established at EU level are too relaxed, Member States with higher ambitions in this respect could face a competitive advantage (Metta & Lakner, 2021).

Given the environmental challenges faced by Germany and the urgent need to approach them, in the period of the half-year mandate in the rotating presidency of the EU Council (July-31 December 2020), the federal authorities pleaded for the establishment of an efficient conditionality system that would not lead to the creation of competitive disadvantages for European and German farmers. At the same time, it was pointed out that the system needed to be supplemented by financing schemes introducing new specific conditions and comprising adequate incentives for farmers, for a better implementation of the rules in question.

2.3.2 Eco-schemes and the challenges created for the German agricultural sector

Environmental and climate schemes are an instrument included in the CAP Pillar I – to be accessed on a voluntary basis by farmers –, based on a set of objectives that leave room for interpretation (Box 4), given the at times divergent requirements and characteristics they set out (Röder & Matthews, 2021).

Box 4: Climate and environment schemes under the new CAP

ECO-SCHEMES

- ✓ Are binding for Member States but optional for farmers;
- ✓ Have the form of: i) a lump sum additional to Direct Payments or ii) a specific payment;
- ✓ Are designed as annual commitments under that the farmers may decide (periodically) to access or withdraw from;
- ✓ They are based on the provision by the Member States of a list of agricultural practices envisaged, as well as of the conditions imposed to farmers to be able to benefit from financial support. However, because it is not yet clear what are the practices accepted by the EC in the process for the approval of the CAP national strategic plans, Member States requested the European Commission to consider one of the following actions: a) the publication of a “white” list of optional measures and practices; b) the publication of a “black” list – the exclusion of certain measures; c) ex-post performance control, based on a set of indicators.

¹¹ For example, as regards environmental standards or indicators.

¹² Related to: GAEC 1 – Permanent pastures; GAEC 8 – Crop rotation (at present, Crop diversification) and GAEC 9 – Non-productive areas of ecological interest, currently Areas of ecological interest (GAEC 7).

¹³ For example, GAEC 2 – Appropriate protection of wetlands and peatlands.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ They enable a well “targeted” use of the direct payment budget under Pillar I, for the achievement of the environmental and climate objectives; ▪ They offer higher flexibility to Member States in relation to the payment amounts, compared to AECM, because they are calculated as a supplementation of the income support; ▪ They enjoy a higher degree of acceptance at sectoral level, because only actual farmers will be eligible. 	<ul style="list-style-type: none"> • They entail the risk of double financing, resulting from the fact that eco-schemes are included in Pillar I, and the agri-environment and climate measures – AECM, in Pillar II of the CAP. Although, to avoid double financing, eco-schemes should not be overlapping with agri-environment climate commitments, the elimination of these similarities could have a negative impact on the inter-scheme complementarity; • They cause the danger of low AECM absorptions: being designed as incentives higher than the opportunity cost, eco-schemes could lead to the reduction of the degree to which farmers use payment schemes for agri-environment and climate schemes.

Source: Synthetic adaptation by the author based on Metta & Lakner (2021) and Röder & Matthews (2021).

Beyond the aspects listed, a possible shortcoming related to the introduction of eco-schemes in the new CAP is the long period of time required for their adoption, especially since they will be able to be implemented only after the NSPs are approved by the European Commission (estimated for 2023) and, later, after the end of the two-year period established for adaptation (by the EU Council). As a consequence, the application of potential adjustments regarding the eco-schemes will only be possible after 2025, although the adoption of long-term measures is a prerequisite for the reduction of GHG emission and the preservation of biodiversity.

In Germany’s case, its federal structure generates certain additional difficulties related to the approach, resulting from the fact that the strategic plan must be drawn up at national level. As a result, the negotiations between the representatives of the federal government and those of land governments sought to find an optimum solution to make eco-scheme payments uniform at national level. Several working hypotheses were therefore admitted and, based on each of them, a series of scenarios were designed.

Due to this, it was concluded that regardless of the level of support for good environmental and climate practices, the rate of absorption for farmers in regions with high agricultural production would be lower than that in the less productive regions. Therefore, a consequence of uniform payments would be a transfer of funds from lands with extensive agricultural activities to those with reduced production.

As an example, a low level of payments could lead to the failure of meeting the obligation assumed with respect to spending the minimum 20% of the CAP Pillar I funds, which would entail the return of unused amounts¹⁴ (Lampkin, et al., 2020). To avoid such transfers, another scenario studied during the debates between the parties was that of applying high value payments, with a cap at farm level. However, based on the results of specific analyses, it was concluded that even with this formula, the support flows intended for regions with reduced agricultural productivity would generate increased inefficiency, and the weaknesses of the greening process could not be remedied by introducing eco-schemes.

In these conditions, a first decision of the federal authorities was that an immediate priority related to the CAP strategic plans should be the clarification at EU level on how eco-schemes should be applied in accordance with regional productivity. At the same time, payments for eco-schemes should be mainly based on opportunity costs and comprise a minimum income element (which should be applied similarly to payments related to payments for agri-environment measures under Pillar II). Another solution could be to apply payment ceilings differentiated according to regions, depending on productivity and the potential opportunity costs required by the absorption process. If the transfers of funds between the federal states reach critical thresholds, these disparities could be compensated by modifying the distribution of EAFRD funds between the lands in question.

2.3.3 Support for organic farming

Defined as a set of plant cultivation and animal rearing practices using methods and means that do not interfere with natural processes, organic farming consists of modern production processes that do not, however, use fertilizers, synthetic pesticides, hormones, antibiotics, stimulants and growth regulators, etc., which makes the support for such agricultural practices a central goal of the post-2022 CAP.

¹⁴ Because budgetary rules do not allow unused funds to be carried over for the following year.

Given the fact that the European Commission's *Biodiversity 2030* strategy announced the "target" of achieving a share of 25% for organic farming, one of the main challenges for Member States is that of ensuring an adequate and well-targeted support for meeting this objective within the time limit set out. In Germany's case, meeting this objective would mean an increase by around 15% of the share currently held by organic farming (Box 5), which would translate into the transformation of around 2.5 million hectares of agricultural land intended for traditional agricultural farming into land used for organic farms (Federal Ministry for Food and Agriculture, 2021).

Box 5: Synoptic table showing the situation of organic farming in Germany in 2019*

- 1.6 million hectares of agricultural land are used for organic practices, which corresponds to a share of around 9.3% of the total national agricultural land;
- around 34,000 farms (13%) comply with the EU regulations on organic farming;
- approximately EUR 12 billion in income from organic food products;
- the German organic farming market is the second largest worldwide, after that of the US.

Note: *The last year for which data are available.

Source: Federal Ministry for Food and Agriculture (2021) and German Organic Food Association (2020).

The challenge is not only to persuade national farmers to change their production practices, but to acknowledge that the development of markets for the products of organic farming must also be taken into account, because these products are sold at higher prices. Nevertheless, the German organic sector has multiple development opportunities, provided adequate measures are taken. In the conditions in which the European Commission is to present a joint action plan to expand this sector, the *German strategy on the future of organic farming* could represent a model in this direction, because it has presented a roadmap for achieving a share of 20% for organic farming by 2030 (Federal Ministry of Food and Agriculture, 2017).

According to this German strategy, a first issue to be tackled to increase the scope of domestic organic farming was related to the drawing up of measures taking into account market evolution. While the CAP reform has recently created special financing for organic farming, the application of environment and climate schemes could present certain shortcomings in this regard. First of all, eco-schemes are an annual measure, while conversion into organic production is a lengthy process covering the farms' entire activity. Because of this, if eco-schemes were designed as sources of support for organic farming, accommodation should be made for the lengthy nature of the required financial support, by including additional applications. Also, another challenge is the design of the allocation of payments through eco-schemes, so as to avoid an excessive support granted to the conventional agricultural system or to avoid over-financing, which could undermine the strategy for the development of organic farming.

3 The German strategic plan for CAP reform – an overview

In March 2021, during the reunion of agriculture ministers from the federal states and the German Ministry for Food and Agriculture, the parties agreed on certain important aspects for the reform of the Common Agricultural Policy and on the basic characteristics of the financial structure included in the national strategic plan for the CAP.

As far as Germany's agricultural policy is concerned, it must be stated that the decisions related to the CAP Pillar II (EAFRD) are generally adopted at the level of the federal states, and the decisions related to Pillar I (valid nationally) are the responsibility of the ministry in Berlin, which is the main decision-maker. But even in this case, the federal government and the land governments work together to design the CAP, within the *Conference of German Agriculture Ministers* (AMK¹⁵).

Although the conclusions of the March reunion stated that the financial decision agreed upon would enable the CAP to better approach environmental objectives (Lakner, 2021), a series of important details have yet to be established, and the individual measures – having a decisive role in terms of efficiency – have not been determined so far.

A. Conditionality

Representing the basis for the granting of support in agriculture, conditionality underpins the achievement of environmental preservation objectives in agricultural areas at national level. Because it is mandatory for Direct Payment beneficiaries, it covers almost half of all agricultural land areas in Germany and, as a result, it represents

¹⁵ The acronym stands for the German Agrarministerkonferenz.

the foundation for environmental protection within CAP (Federal Ministry for Environment, Nature Conservation and Nuclear Safety, 2021). For this reason, the *Good Agricultural and Environmental Conditions* must be modelled as ambitiously as possible at national level.

However, in the last conference of agriculture ministers, only several marginal GAEC provisions were adopted. As such, as regards GAEC 1¹⁶, it was established that an area may keep its status as pasture if this status was acquired beginning with the reference year 2015, and as regards GAEC 9, it was stipulated that the minimum requirements resulting from the dialogue between the European Commission, the European Parliament and the EU Council needed to be adopted as such (Annex 1).

B. Eco-schemes

The German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) pleads for the introduction of eco-schemes that would contribute to: a) stimulating the farmers' decision to shift towards environmentally friendly agriculture or to consolidate pre-existing approaches that proved to be efficient; b) prioritising the implementation of measures for the conservation of the environment and of biodiversity in all agricultural fields and remunerating the farmers' voluntary environmental services, based on performance and attractiveness.

Based on these objectives, the BMU proposes an eco-schemes catalogue, starting from the need of drawing up a comprehensive framework for maintaining the environmental characteristics and the biodiversity in the agricultural landscape in an almost natural form. From among these, we mention the following (selectively):

1. Creation of areas with a high value for biodiversity by: planting flowers, creating vegetative filter strips and cultivating permanent crops, until reaching the share of 10% of the total land area;
2. Management of small land plots and the improvement of landscape characteristic: planting of flowers, permanent pasture hedges, visibly delineated individual land plots, which help protect against erosion;
3. Transformation of arable land into permanent pastures – for reasons related to the mitigation of climate change, but also to protect water and soil quality. Because reconversion must be excluded, this measure should be rewarded by means of a one-off payment meant to compensate both the income losses, and the losses resulting from the decreased land value;
4. Reduction of excess nutrients: payments to individual holdings that use a share of nitrogen- and phosphorus-based fertilizers lower than the maximum admitted in accordance with the Ordinance on nutrient flows;
5. Withdrawal or reduction of the use of synthetic pesticides;
6. Crop rotation diversification, with at least five main crops and at least 10% leguminous plants and catch crops, to support soil fertility and reduce pesticide use.

C. Transfers to the CAP Pillar II

As regards the reallocation of the budget from Pillar I to Pillar II, AMK decided on significantly higher percentages, given both the financial structure of the CAP after 2020, but also the reduction of EAFRD funds (Table 4).

Table 4: Reallocation of funds from CAP Pillar I to Pillar II, 2021-2027

2021/2022	2023	2024	2025	2026/27	Average 2023-2027
6%	10%	11%	12.5%	15%	12.7%

Source: Lakner (2021).

Reallocated funds will not be accompanied by co-financing, and the purposes of these transfers will be dedicated to: a) agri-environment and climate actions; B) the protection of water resources; c) the promotion of organic farming; d) the granting of compensatory allowances in disadvantaged areas.

D. Coupled payments

In the last financing period (2014-2020), Germany was the only EU member country that did not use coupled aid. This time, the authorities decided to introduce coupled payments for suckler cows (EUR 60/ha) and ewes (EUR 30/ha). In principle, these payments are justified from an environmental point of view, because suckler cows and ewes often graze on biodiversity rich pastures.

¹⁶ Standard related to pastures protected pursuant to the Habitats Directive (located outside the Natura 2000 sites), to carbon-rich sites, to those with risk of erosion or located close to the aquifer.

E. Redistribution – first hectare

Germany will continue to apply the practice of increased payments for a number of “x” hectares (first hectare payments). In the following financing period, around 12% of direct payments will be used for this purpose. For the first 40 hectares, the payment will be of EUR 69/ha, and for the next 41-60 hectares, the payment will be of EUR 41/ha. This percentage is substantially higher than during the last financing period, when only 6.9% of direct payments were used for the first 46 hectares. The financial volume increased from 6.9 to 12%, but the upper limit of 60 hectares is the result of structural changes.

5 Conclusions

The new CAP creates leeway for each Member State to decide the level of payments and/or how to redistribute them among farmers, to better adapt sectoral interventions depending on the specific forms of the national producer organizations, to adequately draw up their own rural policies, in the sense of strengthening territorial cooperation and of an integrated approach and, also to be able to opt for enhancing conditionality standards for the farmers receiving support.

However, to benefit from the full potential derived from the national strategic plans regarding the CAP, a close collaboration between the representatives of the European Commission, decision makers and Member States’ agriculture experts is required from as early as the design stage. This condition is essential because, from the preliminary steps taken, in countries with a regionalised system such as Germany, it was found that there are a series of political and technical challenges, and additional measures are required to overcome these obstacles. To this end, increased attention should be paid to the new CAP financing model, which is based on the possibility of a more flexible transfer of funds granted from the two pillars through a unique strategic plan. As we have illustrated in Germany’s case, the efficient design of eco-schemes and concrete measures for the support of organic farming become very complex tasks, which affect not only farmers’ decisions, but also their income on the medium and long term.

Also, as illustrated by the particularities of German agriculture, financial resources and the efficient design of environmental instruments – conditionality, eco-schemes, agri-environment and climate measures – require a clear and comprehensive strategy enabling an adequate approach of all challenges related to the environment ensuring higher ambitions in the field of environmental protection.

Because it is difficult, in a federal system, to establish uniform eco-schemes, clear objectives should be established to allow for their application under the post-2022 CAP. Hence, eco-scheme payments should be based on opportunity costs, and, if an income component is granted, it should be applied both to eco-schemes, and to agri-environment and climate measures. In this sense, policy-makers could consider a differentiation of payments depending on regional opportunity costs. If Pillar I funds are transferred between federal states by means of various regional transfer models, the federal government could consider a distribution of financial resources through Pillar II.

Annex 1: Evaluation of the relevance of the recommendations comprised in the Good Agricultural and Environmental Conditions (GAEC) within the post-2022 CAP for Germany

Post-2022 conditions / Estimates on the relevance of the conditions *	Recommendations on improved conditions (German Ministry for the Environment, Nature Conservation and Nuclear Safety - BMU)
GAEC 1: Maintenance of permanent pastures, based on establishing a ratio between them and the total agricultural area; ✓ Moderate climate relevance: around 40%;	- Pre-setting of the share of permanent pastures at EU level; - Prohibition of the changing of their use;
GAEC 2: Appropriate protection of wetlands and peatlands; ✓ Moderate/high climate relevance: up to 100% (depending on how the condition is formulated);	- Clarification of the term “appropriate” and pre-setting of mandatory ceilings at EU level;
GAEC 3: Prohibition of stubble burning on arable land, with the exception of situations in which this measure contributes to the improvement of plant health; ✓ Moderate climate relevance: around 40%;	- Extension of the GAEC 6 recommendation in the previous MFF (<i>Application of adequate standards for maintaining soil structure</i>), by mentioning the adequate practices;
GAEC 4: Creation of buffer strips (protective strips) in the vicinity of surface water courses;	- Definition of the width of buffer strips;

Post-2022 conditions / Estimates on the relevance of the conditions *	Recommendations on improved conditions (German Ministry for the Environment, Nature Conservation and Nuclear Safety - BMU)
✓ Absent/moderate climate relevance: 0-40%;	
GAEC 5: Implementation of the provisions of the “From farm to fork” strategy regarding the reduced use of inorganic nitrogen-based nutrients (Box 2); ✓ Moderate/high climate relevance: up to 100% (depending on how the condition is formulated);	- Definition of quantifiable objectives with regard to the use of nitrogen-based fertilizers or the replacement of this recommendation with GAEC condition 12 , proposed by BMU;
GAEC 6: Management of soil preparation works (e.g. ploughing and cultivation) to reduce the risk of degradation, including by taking the incline into consideration; ✓ Absent/moderate climate relevance: 0-40% (depending on how the condition is formulated);	- Introduction of specific restrictions or the application of green practices for soil works, to favour carbon capture in the soil;
GAEC 7: Coverage of arable land with crops, in particular during sensitive periods; ✓ Moderate climate relevance: around 40%;	- More detailed explanation related to what is considered to be “sensitive periods”;
GAEC 8: Crop rotation;	No climate relevance
GAEC 9: Establishment of minimum shares of the total agricultural area dedicated to non-productive areas of environmental interest; Maintaining the landscape characteristics; Prohibition of cutting hedges and trees during bird reproduction periods and during the growing season; ✓ Moderate climate relevance: around 40%;	- Establishment at EU level of minimum shares of the total agricultural area allocated to non-productive areas of environmental interest and/or of the reference landscape particularities; - More detailed specifications, such as the provision of a list of appropriate measures, etc;
GAEC 10: Prohibition of changing the use or of the cultivation of permanent pastures in the sites included in the European network of protected areas Natura 2000; ✓ Moderate climate relevance: around 40%;	- Considering the extension of the scope of limitations;
GAEC 11: Inclusion of conditions on animal rearing in order to reduce methane emissions; ✓ Moderate/high climate relevance: up to 100% (depending on how the condition is formulated);	- Provisions related to the improvement of animal feeding practices, as well as in relation to the use of supplements and additives in the animal rearing sector;
GAEC 12: Inclusion of conditions for the proper management of manure, in order to reduce methane and nitrous oxide emissions; ✓ Moderate/high climate relevance: up to 100% (depending on how the condition is formulated);	- Improvement of the degree of use of manure as a source of nutrients for agricultural crops, the introduction of environmentally friendly handling and storage practices, improvement of the quality of animal feed, etc.

Note: * In the sense of contributing to combating climate change;

Source: Author’s synthesis based on, Monschauer & Schäfer (2019).

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