

AGRICULTURE

A greener path for the EU Common Agricultural Policy

It's time for sustainable, environmental performance

By Guy Pe'er^{1,2,3}, Yves Zinngrebe⁴, Francisco Moreira⁵, Clélia Sirami⁶, Stefan Schindler⁷, Robert Müller⁸, Vasileios Bontzorlos⁹, Dagmar Clough¹⁰, Peter Bezák¹¹, Aletta Bonn^{1,2,12}, Bernd Hansjürgens^{13,14,1}, Angela Lomba¹⁵, Stefan Möckel¹⁶, Gioele Passoni¹⁷, Christian Schleyer^{18,19}, Jenny Schmidt^{20,21,22}, Sebastian Lakner⁴

The Common Agricultural Policy (CAP) of the European Union (EU) is one of the world's largest agricultural policies and the EU's longest-prevailing one. Originally focused mostly on supporting production and farm income, the CAP has progressively integrated instruments to support the environment.

Nonetheless, there is considerable agreement among EU citizens that the CAP still does not do enough to address ongoing environmental degradation and climate change (92% of nonfarmers, 64% of farmers) (1). In May and June 2018, the European Commission (EC) published the financial plan and legislative proposal for the CAP post-2020 (2), prompting numerous proposed amendments that the newly elected European Parliament (EP) will now have to consider. With an eye toward the next and final reform stages, including budget discussions and "trilogue" negotiations between the EC, the Council, and the EP to begin in autumn 2019, we examine whether the proposed post-2020 CAP can address key sustainability issues and meet societal demands for higher environmental performance.

The Lisbon Treaty on the Functioning of the EU requires the inclusion of environmental protection measures in all EU policies. The CAP thus has an obligation to address environmental pressures (e.g., biodiversity loss) linked to agriculture. Yet the official, constitutionalized CAP objectives have not changed since 1957. These focus

on productivity, farm income, stable markets, availability of supplies, and affordable food prices. Three new objectives that address environmental and societal challenges were introduced in 2010, but the overall set of objectives remains incoherent and unbalanced: The largest share of the CAP budget goes to direct payments (DPs, €40 billion in

2017), a basic income support given to farmers within "pillar 1," based on the number of hectares farmed. In the 2013 reform, an attempt was made for "greening" DPs by incorporating three obligatory measures to support environmentally friendly practices, but it has been ineffective (3, 4). A smaller share of the CAP budget goes to the Rural Development Programme (RDP or "pillar 2," €14 billion in 2017), including agri-environment-climate measures (AECM, €4.5 billion in 2017) to compensate for income foregone associated with environmentally friendly practices (e.g., buffer strips, extensive grazing, or organic farming).

In February and April 2019, the Environmental and the Agricultural Committees of the EP proposed two opposing sets of amendments to the EC's proposal for CAP post-2020, the first substantially strengthening environmental safeguards, the second substantially weakening them. The EP will have to consider both proposals when progressing the reform process, but experience from previous reforms suggests that the final negotiation stages bear a substantial

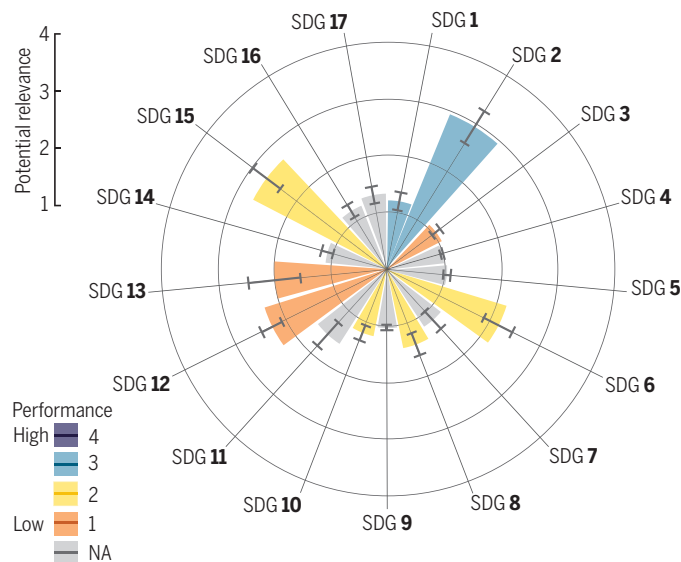
risk of watering down environmental ambitions (5). Accordingly, we here analyze five main challenges and provide recommendations to help put the CAP onto a greener path.

ALIGN CAP WITH SDGS

[see supplementary materials (SM) 2.] Although political priorities of many European countries regarding the CAP may not focus on sustainability, the EC endorsed the United Nations' Sustainable Development Goals (SDGs) and identified 13 SDGs to which the CAP could contribute (6). This requires commitment of all member states (MSs). We estimate that the CAP can make a substantial contribution to nine SDGs, yet its current instruments provide some support only to SDGs 2 (zero hunger) and 1 (no poverty), and limited to no support to all other SDGs (see the first figure). Acknowledging public demands, the EC's post-2020 CAP proposal (2) expresses clear commitment to environmental sustainability and to supporting the SDGs and introduces nine new objectives targeting different dimensions of sustainability. However, several objectives conflict with each other and with original 1957 objectives, and the proposal does

CAP and the SDGs

The potential relevance, and current performance of the Common Agricultural Policy (CAP) toward supporting the Sustainable Development Goals (SDGs). The mean and standard error of relevance (size of bar) were estimated by expert knowledge, ranging from low (1) to high (4). Performance (color coding) was assessed based on (15), ranging from little or no support (1) to high support [(4), but no such cases found]. For methods, see SM 1.



Sustainable Development Goals

- | | | |
|-------------------------------|---|---|
| 1 No poverty | 8 Decent work and economic growth | 12 Responsible consumption and production |
| 2 Zero hunger | 9 Industry, and innovation and infrastructure | 13 Climate action |
| 3 Good health and well-being | 10 Reduced inequalities | 14 Life below water |
| 4 Quality education | 11 Sustainable cities and communities | 15 Life on land |
| 5 Gender equality | | 16 Peace, justice and strong institutions |
| 6 Clean water and sanitation | | 17 Partnerships for the goals |
| 7 Affordable and clean energy | | |

not clarify how priorities should be set and trade-offs addressed, especially when budgets are strongly unbalanced (see the second figure). Moreover, some objectives and SDGs cannot be met without updating the CAP's instruments. For instance, SDG 12 (sustainable consumption and production) is virtually unsupported (beyond schemes to promote healthier food in schools), and SDG 11 (sustainable cities and communities) is barely supported, although the CAP could contribute to promoting nature-based solutions in rural areas (e.g., to decrease hazards like wildfires).

To address societal demands for sustainability, the CAP post-2020 needs a more coherent set of clear objectives, linked to SDGs and associated with measurable targets. Priorities should be refined and reflected in the budget structure. Guidelines should be developed for MSs to develop strategic plans that clearly address trade-offs between objectives and minimize the risk of a biased selection of preferred objectives by MSs. Making an effective contribution to SDGs requires refining existing instruments (e.g., to support sustainable farming systems, promote employment for women, and diversify income) and designing new ones (e.g., on high nature value (HNV) farming systems, nature-based solutions for risk mitigation, and citizen participation). Coherence between CAP instruments and other policies should be improved and impacts outside the EU addressed.

BALANCE INSTRUMENTS AND BUDGETS

(See SM 3.) The CAP's largest budget share still goes to DPs (68.9% in 2017), despite their original design as transitional payment to support farmers following the 1992 CAP reform. DPs have been shown to be ineffective toward all dimensions of sustainability (7, 8). They are unevenly distributed (1.8% of recipients receive 32% of payments), leak toward land rents and nonfarmers, distort land markets, and fail to maintain reasonable incomes or to halt rural employment decline (8). Greening of DPs seems largely ineffective in terms of biodiversity conservation (3) and climate change mitigation (see the first figure) (9). Moreover, highest investments are made into the least effective greening (€789.9/ha), compared to a third as many payments for the more effective AECM (€247.2/ha).

The list of author affiliations is available in the supplementary materials. Email: guy.peer@ufz.de

The most targeted Natura 2000 investments into protected areas receive a mere €24.9/ha (7).

The proposed CAP includes a 28% budget cut for pillar 2 (compared to only an 11% cut for pillar 1), which expands DPs to 73% of CAP by 2027, without providing clear justification for their maintenance or addressing their flaws. The proposed update to the “capping and redistribution” mechanism, aimed at addressing inequalities in

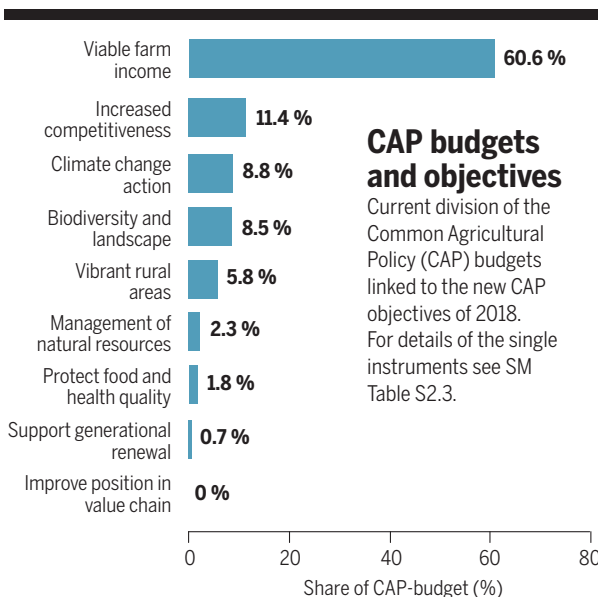
for public goods” (11). Examples to follow could be Switzerland and current plans for the United Kingdom. In the short term, a larger proportion of the budget should be secured for AECM and Natura 2000 payments within pillar 2, and for new voluntary “eco-schemes” within pillar 1, incentivizing farmers to provide environmental services beyond basic requirements (e.g., enhanced management of pastures and landscape features). MSs should be granted unlimited flexibility to shift budgets from pillar 1 to pillar 2, particularly to AECM, as proposed by the EP's Environmental Committee.

SHARPEN GREEN ARCHITECTURE

(See SM 4.) The proposed new “green architecture” seems weaker than in the current CAP. The “enhanced conditionality” within DPs contains an expanded set of good agricultural practices requiring farmers to comply with basic standards (“cross-compliance”) concerning the environment, food safety, animal and plant health, and animal welfare, but retains the basic flaw of low sanctioning power for noncompliance. Greening measures are integrated into cross-compliance without defining specific measures, rather than sharpened as recommended in the literature [e.g., (9)]. Some environmental safeguards are canceled (e.g., to avoid

negative impacts of irrigation), and several sectors and instruments are exempted from environmental requirements. AECMs are weakened by the inclusion of new, but vague, management options. Forty percent of the CAP budget 2021–2027 is labeled as “climate friendly” [(2), figure 52], yet without appropriate measures targeting the largest greenhouse gas (GHG) emission sources, namely livestock production, which is still supported by coupled payments (9, 10).

The CAP post-2020 needs a green architecture built on well-defined measures and a strengthened pillar 2. In the short term, harmful subsidies (e.g., coupled payments) should be eliminated and all instruments should be aligned with sustainability criteria, including sectoral payments currently exempted—for example, for wine, olives, and cotton, as well as for young farmers. Instruments in both pillars should be refined to support landscape-targeted and coordinated actions among farmers to reach larger-scale goals such as improved landscape connectivity and supporting farmers in HNV areas. In the longer term, the mandate of AECMs should shift from just compensating income



Data: EU Budget 2017, RDPs 2014-2020
RDP data as of January 24, 2019
Data contains only budget-positions, which could be linked to CAP-objectives

DP distribution by setting a lower maximum limit to DPs (“capping”) and granting a higher payment per hectare for the first hectares (“redistributive payment”), remains weak, because labor costs can again be deducted from farmers’ income calculation in a way that continuously lifts the capping threshold. AECM budgets are reduced, and budget shifts from pillar 2 to pillar 1 are allowed. DPs that are coupled to the production of certain crops and livestock (so-called “coupled payments”), including some input-intensive systems like beef fattening or vegetable production, are maintained despite forming a key obstacle to environmental sustainability (10) and undermining the common market.

To address societal demands, investments in CAP instruments should be balanced according to their environmental and socioeconomic performance. Accordingly, DPs need to be gradually phased out in favor of a system that balances all CAP objectives and supports farmers in need that are engaging in sustainable and environmentally friendly farming, following the principle of “public money

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foregone (i.e., opportunity costs due to implementing farm management beneficial to the environment) to rewarding the delivery of public goods in a way that makes such investment profitable and attractive for farmers.

LINK THE CAP TO REAL IMPACTS

(See SM 5.) The CAP has been increasingly criticized for its administrative complexity and lack of focus on achieved results (8). Further challenges include lack of measurable targets, insufficient incentives to deliver public goods, and insufficient sanctions for noncompliance with environmental requirements of the CAP. The current choice of flexibility elements (presumably under the principles of subsidiarity, where decisions are placed at the lowest effective level) offers MSs and farmers the choice to implement less ambitious and less effective measures that should not be listed in the first place, as observed for greening (4, 7) and payment-redistribution.

The CAP post-2020 proposal for a new, “results-based” delivery model gives flexibility to MSs to deliver results rather than complying with prescribed requirements. Combined with MSs’ national strategic plans that may help as policy-evaluation and management systems (13), there is a potential for ambitious MSs to improve performance. Yet higher flexibility is granted to MSs without setting EU-level targets, target-oriented indicators, improved monitoring guidelines, or improved incentives and sanctions to ensure that desired impacts are achieved. Most “output” indicators and many of the “result” indicators [(2), Annex I] are not proxies of aspired outcomes but merely depict the area or number of farms under certain commitments. Indicators for land-use changes, ecosystem services, specific GHG emission sources, and HNV are absent or insufficient, while other indicators are not justified (e.g., investments in renewable energy). Thus, the proposed implementation model risks hampering the added value of the CAP.

To achieve effective results-based implementation, the CAP post-2020 needs SMART (specific, measurable, achievable, relevant, and time-bound) targets and indicators for improved performance against clear baselines, which are coherent with international agreements, including SDGs. There is a need to expand in situ monitoring of land use, biodiversity, ecosystem services, and human well-being. Monitoring and implementation processes should engage farmers, scientists, and citizens to better evaluate the impacts of interventions, to ensure delivery, and to promote societal inclusion, innovation, and adap-

tive management. Finally, a more coherent system is needed that combines regulations, incentives, and sanctions following the “polluter pays, provider gets” principle.

IMPROVE THE REFORM PROCESS

(See SM 6.) Previous CAP reforms have been criticized for their lack of transparency and knowledge integration, and for being strongly constrained by predetermined structural decisions. Indeed, budget distributions between CAP pillars are decided before agreeing on the reform objectives, priorities, and instruments. The increased number of CAP objectives, and related discourses, has generated a complexity that allows powerful interest groups to push their agendas into the policy design (14). In the 2013 CAP reform process, the dominance of farmer lobby groups led to (re)orienting the political discourse toward production, expanding harmful subsidies, and watering down targeted, ambitious instruments (e.g., greening) (15).

Acknowledging the need for a more open process, the preparatory stage of the current reform included broad public consultation. However, an official policy evaluation (fitness check) was launched after publication of the CAP 2020 in June 2018. The choice to maintain the CAP’s structure and expand DPs ignores compelling evidence [e.g., (7, 9, 11)], public opinion (see the first figure), and published feedbacks on the initial CAP proposal, thus showing strong reluctance to change.

Improving the CAP is therefore unlikely to be achieved without improving reform processes. For one, the CAP’s design and implementation, currently governed by agricultural committees, ministries, and agencies, needs to fully integrate their environmental counterparts to reflect on the multifunctionality of agricultural and rural areas, and the range of affected stakeholders. Robust and transparent policy design should be built around existing knowledge and societal preferences, ensuring a balanced representation of all relevant stakeholders. Full disclosure of documents and data, during both the reform process at the EU level and the development of strategic plans by MSs, should enable competent public response. In the longer term, a strengthened science-policy interface could improve the integration of existing knowledge into the CAP’s design and implementation. This could also guide science to address the most policy-relevant knowledge gaps such as indirect CAP impacts on biodiversity and ecosystem services, global impacts of the CAP, and social and political processes impeding improvements to policy design and implementa-

tion. Public participation and knowledge coproduction can help identify paths to reduce trade-offs, cover the immense monitoring gaps (e.g., through citizen science), and unlock societal innovation potential.

A CHANGE OF MIND-SET AND CONDITIONS

Although the proposed CAP claims to better address key societal challenges, our assessment suggests that the CAP post-2020 is unlikely to improve its performance toward environmental, economic, and social sustainability and may even risk expanding harmful subsidies. Sufficient knowledge and experience are available to support numerous improvements, but rectifying the current trajectory requires a change of mind-set and conditions for reform. Unlocking the CAP’s potential for meeting the public’s demands on sustainability and the environment may prove to be a more effective way of spending taxpayers’ money and regaining public acceptance. ■

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