

Improving eco-schemes in the light of agroecology (Policy brief)

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IMPROVING ECO-SCHEMES IN THE LIGHT OF AGROECOLOGY

Key recommendations for the 2023-2027 Common Agricultural Policy

Forward

On the 25th of June 2021, the EU finalised its negotiations for the new Common Agricultural Policy (CAP) that is set to come into power on the 1 January 2023 and run until 2027. While this CAP is being championed by its creators as a radical new framework for tackling agricultural and environmental issues, it has left many civil society organisations to wonder if it will deliver on the commitments found in other legislations such as the Farm to Fork Strategy of the EU Green Deal.



The Horizon 2020 project, Agroecology for Europe (AE4EU), aims to take part in this discussion and provide insights for policy makers and Member States in order to ensure that this new CAP is as robust as possible and delivers on its promises for change.

Integrating Eco-schemes according to agroecology

One of principal changes within the new CAP has been the inclusion of Eco-schemes – voluntary programmes linked to the first pillar which will be available to farmers with the hope to incentivize more ecological and environmentally-friendly farming practices. While agroecology holds an eminent space within this list by being listed as one of the primary recommendations, it does so within a role of just another practice to achieve a more sustainable farming system.

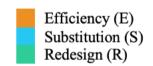
As stated by many before, such as Hill (1985), Gliessman (2016) and Agroecology Europe (2021), agroecology is not just the substitution of one practice for another, it is a restructuring of the entire agricultural and food system. It is not just a tool to increase efficiency, it is a paradigm shift that uses food, health and the environment as a starting point to create a system that is inherently resilient. Further, it is important to remember that agroecology consists of three major elements: a set of practices, a science and a social movement (Wezel et al., 2009, Agroecology Europe, 2020).

As Agroecology Europe (2021) has proposed earlier this year, it is important to separate practices (i.e. buffer strips, winter cover crops) and production systems (i.e. agroecology, agroforestry, organic farming) for a more cohesive integration of Eco-schemes. Production systems such as conservation agriculture, agroforestry, and extensive silvo-pastoral systems should be subsidized by basic premiums, as organic farming is. Practices that can be implemented on their own, and are not production systems themselves, should be reclassified into three separate measures, those that: increase input efficiency, substitute inputs and redesign the production system. Such categories can be further classified according to the function they fulfil within agroecosystems: soil fertility, weed management, pest and disease control, pasture management, animal welfare, biodiversity and pollinator conservation, and climate change mitigation and adaptation. A further description of what such a system would look like can be seen in Table 1, where each measure is represented by a different colour: efficiency (E) in orange, substitution (S) in blue, and redesign (R) in green.

Table 1:

Table 1: Classification of the Eco-schemes proposed by the Commission according to the logic of "efficiency – substitution – redesign" (letter and colour code) and the logic of classification of measures in relation to agroecosystem service management (columns). Each measure is represented by a different colour: efficiency (E) in orange, substitution (S) in blue, and redesign (R) in green. (source: Agroecology Europe 2021).

	MANAGEMENT OF ALL TYPES OF CROPS AND GRASSLANDS		MANAGEMENT OF ALL TYPES OF CROPS		GRASSLANDS AND LIVESTOCK		ENVIRONMENTAL MANAGEMENT		
	Soil fertility	Weed management	Pest management	Disease management	Grassland management	Animal welfare	Biodiversity conservation and restoration	Pollination conservation and enhancement	Climate mitigation and adaptation
IPM Practices									
Buffer strips with management practices and without pesticide			R				R	R	R
Mechanical weed control		S			S				
Increased use of resilient, pest-resistant crop varieties and species	R	R	R	R					R
Land lying fallow with species composition for biodiversity purpose							R	R	
Agroecological practices									
Crop rotation with leguminous crops	R	R	R	R			R	R	R
Mixed cropping - multi cropping	R	R	R	R			R	R	R
Cover crop between tree rows on permanent crops	R	R	R	R			R	R	R
Winter soil cover and catch crops above conditionality	R	R	R	R			R		R
Low input efficient grass-based livestock system	R	R			R	R	R		R
Mixed species/diverse sward of permanent grassland for biodiversity purpose			R	R	R	R	R	R	R
Improved rice cultivation to decrease methane emissions									E
Husbandry and animal welfare plans									
Providing access to pastures and increasing grazing period for grazing					R	R			
Shepherding on open spaces and between permanent crops, transhumance		R			R	R	R		R
Semi-natural habitat creation and enhancement		R	R	R			R	R	R
Establishment and maintenance of permanent grassland	R				R	R	R	R	R
Extensive use of permanent grassland	B		B		R	R	В	R	R
Animal health prevention and control plans: overall plan for reducing the risk of					R	R			
Practices increasing animal robustness, fertility, longevity and adaptability,					R	R			R
Mixed grazing (minimum 2 species)					R	R			
Improved manure management and storage	R				R				
Carbon farming practices		•							
Rewetting wetlands/peatlands, paludiculture							R		R
Minimum water table level during winter									R
Appropriate management of residues, i.e. seeding on residues	R						R		R
Nutrients management plan, use of innovative approaches to minimise	E								E
Precision farming	-								
Precision crop farming to reduce inputs (fertilisers, water, plant protection	F	F	F	F					F
Improving irrigation efficiency	E	-	-	-					
Managing crop water demand (switching to less water intensive crops,			-	-					R
Feed additives to decrease emissions from enteric fermentation									F
Other practices									-
Erosion prevention strips and wind breaks									
Establishment or maintenance of terraces and strip cropping	н		В				н	н	н
Implementation of nitrates-related measures	R F	R	н	R	F		Н		_
implementation of fill ales-related measures	E				E				E



Further, in order for Eco-schemes to truly lead to a long-term redesign of agricultural systems, it is important for them to be multi-dimensional. Policy makers should encourage the implementation of several practices at once, as a practice on its own has little strength in creating true sustainability. Rather than a menu of options farmers can choose from. packages should be constructed in a way where complexity and synergy is created on farms with many proven environmental benefits. Higher subsidies can also be given to farmers who are implementing these packages or several practices at once - Agroecology Europe has provided calculations of what this would look like (Agroecology Europe, 2021). Such packages could also include multiple tiers, with different levels of pay for different efforts, rather than flat rates (BirdLife Europe et al., 2021).

It also important for conditionality to remain rigorous, and not be weakened or included within Eco-schemes. Practices that are already common or very basic should not be rewarded. For example, a few countries are planning to pay farmers to grow cover crops during winter. Although this practice is vital for the protection of soils, there are already obligations to have soil cover during sensitive periods within conditionality. Funding should focus on demanding interventions that maintain fair rewards for farmers who want to make greater efforts to be more sustainable and provide ecosystem services. If successful funding schemes are not created, there is immense risk that low ambition schemes will sideline more worthwhile schemes which will not be attractive enough for farmers to uptake them on a large scale (BirdLife Europe et al., 2021).

Around 25% of the CAP direct payments, € 8-9 billion per year are planned to go to Eco-schemes. This public taxpayer money, along with the total €387 billion CAP budget, should pay for public goods and reward ecosystem services with proven

environmental benefits, for example the carbon sequestration in agricultural soils, restoration of biodiversity farms and in agricultural landscapes, the development of ecological networks and conservation of semi-natural landscape elements (e.g. hedges, wood clumps, herbaceous strips, ponds).

Recommendations for Eco-schemes

- 1. Separate practices from production systems.
- 2. Create basic premiums for all eco-friendly agricultural production systems.
- 3. Create multi-dimensional Eco-schemes that encourage the implementation of multiple practices at once.
- 4. Ensure proportionality between the level of payment and the expected environmental benefits.
- 5. Maintain rigorous conditionality by not paying for what should be mandatory.
- 6. Public money for public goods.

Assessment of draft Eco-schemes

An assessment of the Eco-schemes shows that only 19 % of schemes are likely to deliver their environmental objectives, with 40 % needing significant improvements and 41% either concerning or completely greenwashing. Well-designed schemes are underfunded, while their less demanding counterparts remain more financially attractive (BirdLife Europe et al., 2021). This is dangerous for true environmental benefits to biodiversity, soil health, and climate mitigation and adaptation.

Further, the forementioned assessment has found many policy gaps within the proposed strategic plans including only two countries creating schemes to reduce antimicrobial use (although both schemes were deemed poor and as potential hidden subsides for intensive animal farming); only one scheme reducing herd size; only a few schemes focusing on growing feed to reduce feed import (a major solution for climate mitigation); only one scheme ceasing farming on drained peatlands (another major source of climate mitigation) and none to incentivize paludiculture; minimal support for agroforestry; and finally, the inclusion of precision farming without any rules for the reduction of fertiliser and pesticide use (BirdLife Europe et al., 2021).

Agroecology related Eco-schemes in draft national CAP strategic plans

An analysis by the AE4EU project on the inclusion of agroecology related Eco-schemes in the draft national strategic plans, shows a low number of agroecology-related policies (Table 2). While on average, countries have around three Eco-schemes with agroecological elements, with five being the highest (Poland) and zero the lowest (Belgium - Wallonia, Cyprus), there is a lot to be said for the strength of the existing Ecoschemes, which as mentioned above, are found by many civil society organisations as poor and unlikely to deliver on environmental benefits. The most popular Eco-schemes in the strategic plans are those relating to extensive grasslands management, use of cover/catch crops and organic farming. The least popular, with no schemes found in any countries, are "mixed cropping - multi cropping" and "improved rice cultivation to decrease methane emissions" (although Spain does mention rice production in one of their schemes, the scope remains unclear). Multidimensional Eco-schemes are the most likely to deliver, nevertheless they are found in only five countries - Czech Republic, Estonia, Latvia, Slovakia and the Netherlands. Interestingly, while the Netherlands has only chosen to include a single Eco-scheme within its strategic plan, there are nevertheless four different agroecological elements found in the scheme.

Table 2: Agroecology related Eco-schemes in draft national CAP strategic plans (2023-2027), state of February 2022

Country	Number of Eco-schemes	Eco-scheme name					
Austria	3	Cover crop between permanent crops					
		Low intensity grass-based livestock system					
Belgium (Flanders)	3	Winter soil cover and catch crops Crop rotation with leguminous crops					
Deigium (Flanders)	3	Low intensity grass-based livestock system					
		Organic practices and standards					
Belgium (Wallonia)	0	Ť .					
Bulgaria	4	Winter soil cover and catch crops					
		Cover crop between permanent crops Permanent grassland for biodiversity					
		Organic practices and standards					
Croatia	3	Permanent grassland for biodiversity					
		Winter soil cover and catch crops					
C1 D11	•	Crop rotation with leguminous crops					
Czech Republic	2	Winter soil cover and catch crops Permanent grassland for biodiversity					
Cyprus	0	Permanent grassiand for biodiversity					
Denmark	3	Winter soil cover and catch crops					
		Permanent grassland for biodiversity					
		Organic practices and standards					
Estonia	2	Crop rotation with leguminous crops Organic practices and standards					
Finland	4	Low intensity grass-based livestock system					
Timana	T	Permanent grassland for biodiversity					
		Crop rotation with leguminous crops					
		Winter soil cover and catch crops					
France	4	Permanent grassland for biodiversity					
		Organic practices and standards Crop rotation with leguminous crops					
		Cover crop between permanent crops					
Germany	3	Low intensity grass-based livestock system					
		Permanent grassland for biodiversity					
		Crop rotation with leguminous crops					
Greece	3	Use of crops/plant varieties more resilient to climate change					
		Permanent grassland for biodiversity Organic practices and standards					
Hungary	3	Permanent grassland for biodiversity					
		Low intensity grass-based livestock system					
		Organic practices and standards					
Ireland	2	Low intensity grass-based livestock system					
Italy	3	Permanent grassland for biodiversity Permanent grassland for biodiversity					
italy	3	Cover crop between permanent crops					
		Crop rotation with leguminous crops					
Latvia	4	Winter soil cover and catch crops					
		Cover crop between permanent crops					
		Crop rotation with leguminous crops Low intensity grass-based livestock system					
Netherlands	4	Permanent grassland for biodiversity					
		Organic practices and standards					
		Crop rotation with leguminous crops					
D. 1.		Winter soil cover and catch crops					
Poland	5	Permanent grassland for biodiversity Organic practices and standards					
		Crop rotation with leguminous crops					
		Winter soil cover and catch crops					
		Low intensity grass-based livestock system					
Portugal	2	Permanent grassland for biodiversity					
Slovakia	1	Organic practices and standards					
Slovakia	3	Permanent grassland for biodiversity Winter soil cover and catch crops					
Siovenia	,	Permanent grassland for biodiversity					
		Cover crop between permanent crops					
Spain	4	Crop rotation with leguminous crops					
		Cover crop between permanent crops					
		Low intensity grass-based livestock system					
Sweden	3	Permanent grassland for biodiversity Organic practices and standards					
D WOUGH	,	Permanent grassland for biodiversity					

The way forward

It is clear that many Eco-schemes have not been created with enough coherence, some barely going beyond basic practices and conditionality, and unlikely to sufficiently deliver on needed ecosystem services. What are needed are multi-dimensional Eco-schemes with robust funding, clear targets and proven benefits in order to improve the sustainability of farming in Europe.

The formal review process by the European Commission of the national CAP strategic plans is taking place in early 2022 and marks a key milestone to pave the way towards a consistent agricultural policy that is beneficial to the climate, biodiversity and health. The Commission should encourage and support Member States to restructure their draft national strategic plans in order to set clear objectives and roadmaps that are in line with other major EU legislations and agroecology.



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Images

Ducks in agroforestry image by Heather Birnie, Parc Carreg, farm in Wales

Pigs in agroforestry image by Samantha Makepeace, Northern Native, upland farm in the North East of England

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