

Designing successful schemes to promote the maintenance, restoration and creation of landscape features

This factsheet provides an overview of key factors for designing successful schemes to encourage the maintenance, restoration and creation of landscape features on farmland for their biodiversity value and other environmental, economic and social benefits. The introduction of a 10% target for high-diversity landscape features on all agricultural land in the EU in the Biodiversity Strategy 2030 (and the related target in the proposed Nature Restoration Law) provides new impetus for action on landscape features. Member States' CAP Strategic Plans will be a relevant source of support for land managers to achieve that level of coverage and thereby benefit biodiversity.

There are a range of provisions under the CAP of relevance for landscape features. This includes eligibility conditions for receipt of direct payments, conditionality, including GAEC standards (GAEC 8¹), eco-schemes, investment support, environment-climate commitments and cooperation measures. Not only the quantity of landscape features but also their diversity, location, age, scale, integrity, density within the locality and maintenance have a major impact on their biodiversity effectiveness.

Although there is no single agreed definition of landscape features on farmland, the following types are commonly used in EU policy documents:

- › Woody - Isolated trees, tree lines and avenues, hedges, woody strips, trees in group, field coppices and riparian woody vegetation
- › Grassy - Grassy strips, field margins, embankments, buffer strips, grassed 'thalweg'
- › Water - Inland channels of fresh water, standing small water bodies such as natural or man-made ponds, ditches
- › Stony - Dry stone walls, terrace elements, rock outcrops, natural or artificial stacks of stone

Examples are based on inputs from the EU CAP Network [Thematic Group on Landscape Features & Biodiversity](#).

1. Multiple benefits of landscape features

Depending on their type, location and permanence, landscape features can have significant benefits for the environment alongside those for biodiversity, such as reduced risk of soil erosion and floods, improved water infiltration, availability and carbon capture and protection of pollinators.

- › In **Lower Austria** the Landscape Fund supports and finances the creation of multi-use hedges (through investments), with the agri-environmental programme supporting their maintenance. Multi-use hedges consist of a high proportion of shrubs and fruit trees, and at least 20% of the hedge area is covered with grasses and herbs, which provide additional habitats for insects, birds and mammals. Other benefits for the farm are the fruit provided, the economic value of the deciduous trees in the longer term and help in safeguarding a farm's most valuable asset - its soil.
- › Hedges play a different role in the municipality of Vrbovec, **Czechia**, where a newly planted windbreak, 15 metres wide and 737 metres long, will help to protect the village from the effects of wind erosion resulting from large-scale agricultural production.
- › Elsewhere in **Czechia**, villages which have suffered flood damage will benefit from newly created reservoirs, pools and a polder, also supporting biodiversity and providing recreational access.
- › In **France**, farmers have worked with a national agroforestry network to create the Label Haie, a national certification scheme ensuring good hedge management and a sustainable local wood production sector, so it functions as both an educational and economic tool.
- › In **Greece**, olive farmers in specific areas have benefited from agri-environmental support to maintain landscape features, including ditches, boundaries and terraces, although the programme has limited geographical scope and has not covered extensive cultivation terraces found in Crete, the Peloponnese and North Aegean, especially Lesvos Island.

¹Along with abiding by certain pieces of EU legislation (i.e. Statutory Management Requirements), CAP beneficiaries must also comply with standards of Good Agricultural and Environmental Condition (GAECs) when managing their land to receive the basic income support for sustainability and other area payments under EAFRD. GAEC 8 has two requirements of relevance to landscape features. Firstly, it requires that at least 4% of arable land is covered by non-productive areas and features (or 3% where a farmer commits to devote at least 7% of arable land to non-productive areas and features, including land lying fallow, under an 'enhanced' eco-scheme) or an alternative option covering 7% of arable land at farm level if this includes also catch crops or nitrogen-fixing crops, cultivated without the use of plant protection products, of which 3% must be land lying fallow or non-productive features. Secondly, it provides for the protection of landscape features based on a list set by Member States. Other GAECs may also be of relevance, such as GAEC 4 which provides for buffer strips along water courses.

2. Challenges to maintaining, restoring and creating landscape features

Once lost, landscape features and the biodiversity they promote are hard to replace. However, there are financial costs to the farmer in protecting, maintaining, restoring and creating landscape features. Some farmers may be discouraged by these costs as certain CAP area payments for maintaining these features compensate for income foregone and additional costs. Therefore, farmers may lack the motivation to invest in maintaining, restoring or creating new landscape features that they do not perceive as economically beneficial, particularly if they are not aware how biodiverse landscape features may also provide such benefits, e.g. by providing some environmental services that can help safeguard their farm from climate change or reverse the decline of pollinators in the future.

From 2023, the CAP offers more flexibility as well as possibilities to support the maintenance, restoration and creation of landscape



features than previously. To enable this, some of the rules for farmers have changed (e.g. eligibility rules on whether landscape features are eligible for direct payments). Farmers do not want to risk financial penalties, so they need to understand clearly how the payment levels and requirements of schemes for landscape features that are available via the CSP affect their farm, how to identify and record their landscape features, and of course how to manage or restore them for biodiversity from a technical point of view.

3. Designing support to overcome challenges

Relevant training and technical advice are clearly important to address these challenges, but this is not always readily available or adequately funded. **Austria** has tackled this by using experienced farmers as a trusted source of advice for other farmers, and in addition, farmers who agreed to environment-climate commitments are obliged to attend at least three hours of training on biodiversity in agriculture. In **Bulgaria, Ireland and Wallonia (Belgium)**, there is also an emphasis on training specialist advisors. **Flanders (Belgium)** uses regional funds to provide an advisory service delivered by experienced farm advisers. In **Germany** and other countries, the need to integrate basic ecological knowledge into agricultural education is recognised, with some knowledge already accessible 'off the shelf'.

A different challenge is how to achieve sufficient 'critical mass' of biodiversity-friendly landscape features at scale when this requires multiple farms to engage with voluntary schemes. Some countries offer enhanced payment rates for schemes taken up by a group of farmers, others provide very tailored and targeted support. In an upland parish in **Ireland**, under a Habitat and Biodiversity pilot scheme managed by a local community-led group, 15 farmers have planted hedgerows and fruit trees, created ponds and riparian margins. A project team helped each farmer to draw up a farm plan appropriate to their land, and farmers were given financial compensation for all the measures they introduced. Satellite images of the habitats stimulated interest among the wider upland community. In **Portugal** a fully documented demonstration project on the land of a leading farmer aims to reconcile the profitability of agricultural production with conservation practices and restoration of ecological corridors. One idea is to 'infect the neighbours' so that the benefits are felt in surrounding farms, eventually expanding the ecological corridor area along the Sorraia River. Also, given that landscape features need to be maintained and managed over a long period of time to provide increasing biodiversity benefits and consolidate results already obtained, long-term commitments have been a key component of specific agri-environment schemes under the Emilia-Romagna RDP in **Italy** since the 1990s. Securing long-term payments has encouraged significant uptake of the schemes by farmers in the region.



4. Innovative project design to improve uptake and impacts

BRIDE (Biodiversity Regeneration in a Dairying Environment) is a 5-year EIP project in **Ireland** in the catchment of the river Bride aimed at restoring biodiversity on intensive dairy farms – typically one of the hardest to reach farm types. The aim is for participating farmers to have at least 10% of their land as Biodiversity Managed Areas by the end of the 5 years. This is done via a results-based annual payment scheme where each habitat on their farm is assessed and scored every year, with higher quality habitats gaining higher payments. Farmers were offered 16 measures which included: creating an annual biodiversity plot of up to 0.5ha; creating a pollinator plot (wildflowers); planting a woodland of 160 native trees; increasing field margin widths; creating a pond; planting tree lines; and creating buffer strips along the river and its tributaries. All the farmers chose at least 9 measures. A budget of €2,000 per farm was available for capital improvement measures and most of them used it. A hedgerow management plan was also drawn up for each farm. Other innovations being tested are a certification standard (10% Space For Nature)² and a map-based app to assess the quantity and quality of the habitats on any farm. A total of 44 farmers were accepted, mostly dairy and beef farmers, with priority given to clusters of farmers and farms with target species or habitats, focusing support where it is likely to achieve most for biodiversity.

5. The importance of mapping and monitoring

Supporting landscape features and monitoring improvements in their biodiversity quality depends on individual farmers and funding agencies knowing where these features are. For CAP support, up-to-date, high resolution geospatial data on landscape features should be integrated within the Land Parcel Identification System (LPIS)/Integrated Administration and Control System (IACS) maps (as was the case with the Ecological Focus Area layer in the previous CAP). That way, landscape features would be included consistently by the Member State as features that farmers could declare for the purpose of meeting their GAEC 8 requirements, as well as to guarantee full Basic Income Support for Sustainability (BISS) payments. In practice, the availability, source, weighting and quality of these data varies by landscape feature and region, e.g. **Austria** uses orthophotos taken at 20x20 cm resolution every three

years to identify landscape features, **Wallonia (Belgium)** updates its 2015 reference dataset with on-the-spot checks, internal audits and new lidar and radar imagery. A recent project in **Slovenia** prepared a detailed inventory of hedgerows, solitary trees and bushes, groups of trees and bushes, woody riparian buffer strips, scrub, and drystone walls, using remote sensing data, which it will use to target CSP support.

The latest, high resolution Small Woody Features (SWF) product from the Copernicus Land Monitoring Service could be a major step forward. The SWF utilises satellite data to provide harmonised information about the extent of linear structures, e.g. hedgerows, and patches of woody features across the EU as well as other European countries. The need to update national LPIS/IACS data for the new CAP could be a chance to integrate more data on woody landscape features from sources such as the SWF, which farmers could verify in their returns rather than expecting them to add these themselves (e.g. France's approach in the previous programming period).

6. Flexible implementation and control

Farmers are required to protect the landscape features identified under GAEC 8 (see footnote 1) in their Member State, but for others that are not covered by the conditionality requirement, there is often support available which they can choose to take up in the form of eco-schemes and/or environment-climate commitments for the maintenance, restoration and creation of landscape features. Uptake depends on access to schemes that are both compatible with their farming systems and reflect the cost and effort involved. **Wallonia (Belgium)** responded to poor uptake of 2014-20 agri-environment-climate support for hedges, trees and ponds by listening to farmers' concerns to develop a new eco-scheme for ecological networks which offers more biodiversity options, with higher payment rates and annual commitments, derived from a simple points-based system for the farm, reflecting the total area under trees, hedges, ponds and fallow. Weighting factors and payment rates reflect the relative biodiversity benefit and cost of different features. Within Natura 2000 sites payment rates



²Ireland has demonstrated ambition toward the 10% Landscape Features target by applying GAEC 8 to all farmland, not just arable land, and allowing the full eco-scheme commitment to be met by 10% landscape feature coverage rather than two separate actions required if participating farmers only choose to achieve 7%.

for woody landscape features are doubled. Satellite mapping (via Copernicus) and on-the-ground surveying were also used to map existing landscape features and a network of 42 advisors are available to provide technical management advice and assistance with paperwork, all of which helps to reduce the administrative burden for farmers. **Austria** also further developed their scheme for single trees by slightly increasing the payment rate for non-productive trees and almost doubling the payment rate for single fruit trees, which have a high biodiversity value especially for pollinators and birds.

7. Recommendations for good scheme design to promote landscape features & biodiversity

- › Provide clarity for farmers on the definitions and dimensions of landscape features, their obligations under conditionality, the payments available to them to maintain, restore and create landscape features for biodiversity – and the distinction between ‘productive’ and ‘non-productive’ features.
- › Prioritise protection and enhancement of the biodiversity value of existing landscape features; where new landscape features are created, ensure that these are designed, located and managed to maximise long-term biodiversity value.
- › Improve farm-scale mapping and inventories of different types of landscape features and reduce the administrative burden for farmers by pre-populating LPIS with location data of existing landscape features and allowing farmers to easily link them to their parcels or integrate new ones into the system .
- › Provide for periodic monitoring and analysis of results to ensure that CAP interventions (e.g. agri-environment-climate schemes) to promote landscape features and biodiversity are effective, suitably designed and possible to adjust over time.
- › Embed specialist training and implementation support for farmers within and outside payment schemes, as already done in some Member States - not just on the management



of landscape features but also on the long-term potential benefits for the farm. This requires trusted trainers with an understanding of both ecology and agronomy (e.g. experienced agri-environment advisers). The need to ‘train the trainers’ should not be overlooked.

- › Facilitate and encourage cooperation amongst local farmers to improve landscape feature coverage and connectivity and to encourage peer-to-peer knowledge sharing and innovation.
- › Consider the relative merits of short-term ‘taster’ incentive payments and longer-term contracts.
- › Ensure additionality of different ‘layers’ of landscape features payments that can be used together (e.g. eco-schemes, investment, agri-environment-climate) to encourage uptake, while also ensuring no double funding.
- › Reward the quality not just the quantity of landscape features, e.g. higher payments for more biodiverse landscape features, habitat connectivity across boundaries and landscape features in priority locations; reward farmer motivation and management skills by offering results-based payments for improvements in structural and habitat diversity demanded by society; while also ensuring that farmers are protected from the risk of not delivering the outcomes required due to external factors that are beyond their control.



Mentimeter wordcloud, created by TG members, 15 December 2022

