Field margins have an essential multi-functional role to protect soil and water and enhance biodiversity in agricultural landscapes across Europe, with specific options tailored to local conditions and needs.

Syngenta is one of the world’s leading companies with more than 26,000 employees in over 90 countries dedicated to our purpose: Bringing plant potential to life. Through world-class science, global reach and commitment to our customers we help to increase crop productivity, protect the environment and improve health and quality of life.

Syngenta believes that farmers can produce enough to meet the world’s needs for food, fuel and fiber and safeguard the only planet we have for future generations – if we take a system-wide approach that links technology, land and people. These three elements build the foundation for a sustainable production system in which technology enables better solutions for farmers to increase productivity and profitability, to improve resource efficiency, and contribute to food security. Agriculture depends on biodiversity, which is necessary for productive farming basics such as pollination, healthy soil structures, and a broad range of crop varieties.

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ELO is a European organization representing more than 54 national organizations across 27 European countries. It is a non-profit organization committed to promoting a sustainable and prosperous countryside and to increase awareness relating to environmental and agricultural issues. By engaging various stakeholders, ELO develops policy recommendations and programmes of action targeted to European policy makers. ELO organises interdisciplinary meetings gathering together key actors from the rural sector and policy makers at local, regional, national and European level. Its ability to carry out a variety of activities while maintaining high visibility assures ELO a unique position among the think tanks engaged on agricultural, environmental and rural issues.

Having understood the ecological and economic benefits related to the synergy between pollinators and agriculture, the ELO is working to bridge various stakeholders in order to find practical and effective solutions for the preservation and enhancement of pollinating species and their habitats.

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Field margins help to:
- Enhance biodiversity
- Provide wildlife corridors
- Reduce run off and flooding
- Prevent surface water contamination
- Avoid soil erosion

Active management of field margins offers outstanding potential to improve the ecological and environmental value of farmland, alongside profitable and productive agriculture.

Field margins need to be recognised as an integral part of the whole field. Well managed margins will increase the number of species present in the field and can balance the biodiversity within the agricultural landscape as a whole.

Measures to encourage farmers to manage field margins more effectively will deliver gains for many multi-functional objectives.
Field margins are crucial for the protection of natural resources, such as soil and water, to enhance biodiversity, and for competitive and sustainable agricultural production.

What do field margins look like?

Different designs of field margins can be utilised for environmental enhancement and resource protection - including establishing grass strips, sowing wildflower pollen and nectar sources for insects or sources of seed for birds. Which option, or combination, is selected depends upon the objective required and to supplement existing natural habitat available.

Where margins are actively introduced, they retain biodiversity in the field and offer natural protection for areas beyond the margins. Typically field margins on arable and grassland farms also have some form of boundary feature such as a hedge, fence, wall, ditch or water course. The interaction between the boundary feature and the field margin can further extend the benefit provided by each element.

How multi-functional landscapes support SIA

Field margins play a crucial role for protecting soil and water and to enhance biodiversity on farms, whilst supporting Sustainable Intensive Agriculture (SIA). Farmers, who are the custodians of the land, are on the front line for the conservation of these natural resources.

Over recent decades, changes in farming systems and economics have led to field margins, hedges and ponds that were rich in biodiversity being modified, or even removed.

Whilst there are now legislative requirements for farmers to maintain uncropped field margins, targeted incentives could help stimulate them to actively manage these margins more effectively for biodiversity, as well as soil and water protection.

Today, it is possible to balance competitive farming with biodiversity conservation and the protection of natural resources. This will deliver a more secure and sustainable food supply for Europe, as well as help feeding a growing world population.

Effective future field margin management includes the need to:

- Identify measures that go beyond the mandatory obligations for farmers
- Reward farmers for proactive management of field margins, such as buffer zones to protect water and delivery of broad environmental benefits
- Encourage greater commitment to expand the proactive management of field margins and other on-farm areas, to enhance biodiversity within farmed landscapes
- Implement educational and support programs for the use of best management practices

A multi-functional approach

Syngenta’s field margins approach aims to identify and solve multi-functional landscape issues in a practical and integrated manner. It has been established to demonstrate the feasibility of integrating water infiltration and the prevention of water and soil runoff, together with the enhancement of biodiversity in crop margins.

The results demonstrate that crop margins can be multi-functional – reducing water runoff, soil erosion and pesticide runoff, whilst also enhancing the variety and abundance of pollinating insects. Syngenta’s field margins approach delivers best management practice and advisory tools as part of an integrated and comprehensive solution.

Pollinating habitat for pollinating insects

Pollinating insects are essential for food production, including many fruits and vegetables we eat every day. The value of the services pollinators, such as bumblebees, honeybees, solitary bees and butterflies, provide to the global ecosystem is estimated at €153 billion per year.*

To boost the number of pollinating insects on farmland, Syngenta successfully launched the biodiversity programme Operation Pollinator™ across Europe and the United States. The aim has been to help farmers to create the essential habitats and food sources for pollinating insects.

Growers are provided with a specific seed mixture, innovative crop protection use practices and with agronomic advice designed to benefit pollinators.

Operation Pollinator essentially demonstrates that environmental sustainability and modern farming can coexist and benefit from each other, which is a critical objective with the aim to double global food production by 2050.

In Europe, Operation Pollinator is already working in 13 countries and has improved biodiversity on more than 2500 farms. The project has gained international recognition and has been presented in the European Parliament during the debate on managing public goods and the reform of EU’s Common Agriculture Policy. It was highlighted as a successful example of a simple, practical and proven way of increasing biodiversity on agricultural land.

Why managing biodiversity in agricultural landscapes is important

Across Europe around 50% land is managed by farmers. Of that, arable cropping accounts for approximately 30% of land used – the largest fraction of agricultural land use.

In order to enhance the overall levels of biodiversity there needs to be proper management of fields, field margins and patches of uncropped land, as well as the overall landscape.

A well-managed agricultural landscape will play a significant part in helping the EU to meet its commitment to halt the loss of biodiversity by the end of this decade, and to meet EU policy goals on sustainability for the environment, agriculture and society.

Pollinators Network Initiative

The ELO network, particularly through the Wildlife Estates label, together with Syngenta have created the Pollinators Network Initiative which aims to:

- Create a network of farmers supporting pollinator species, mainly by improving cropping practices
- Use the already existing Wildlife Estates’ network to identify territories with good practices willing to join the Pollinator Network Initiative
- Create a forum for knowledge sharing on sustainable agriculture for biodiversity, bringing together all stakeholders amongst the ELO member associations in the EU
- Engage private land managers in developing and promoting sustainable estate management practices for generations to come
- Facilitate the communication of the Operation Pollinator project in the EU