Examples from travels through five European countries and from studies on ecological effects
Content

Content .................................................................................................................................................................. 2
Introduction ......................................................................................................................................................... 4
1. Examples from across Europe - Why we need Ecological Focus Areas ............................................... 5
   Austria ............................................................................................................................................................ 6
   Belgium .......................................................................................................................................................... 7
   France ............................................................................................................................................................ 8
   Germany .......................................................................................................................................................... 9
   Poland ............................................................................................................................................................ 13
2. Ecological improvements through the EFAs ............................................................................................. 14
3. Examples of possible EFA-types - how to make EFAs one success factor of the greening .. 22
   In-crop-Ecological Focus Areas .................................................................................................................. 22
   Off-crop-Ecological Focus Areas ................................................................................................................ 24
   Criteria and side conditions for the definition of the EFAs ..................................................................... 25
   Key points for a good and adequate implementation of EFAs in the regulations ............................... 26
Outlook ............................................................................................................................................................... 27
References ......................................................................................................................................................... 27
Introduction

The greening of the Common Agricultural Policy (CAP) and especially the Ecological Focus Areas (EFAs) are the most discussed issues of the CAP reform. The greening itself and the demand for EFAs are not put that much in question, it is merely the kind of EFAs and the way of implementation which are subject to numerous discussions.

This brochure is intended to provide visual impressions of the critical current situation concerning biodiversity and ecological issues in European agricultural landscapes as well as to create awareness and to give practical examples for a comprehensive implementation of EFAs. Photo examples from different European countries are presented showing:

a) the necessity of EFAs
b) a photo simulation, how an implementation of EFAs could look like
c) which kind of EFAs are suitable and how the EFAs could be implemented.

In the final part, some key issues are specified which are important for a good and adequate implementation of EFAs in the future CAP.
The examples of agricultural landscapes are taken from five European Countries as indicated on the map. They form only a selection of typical situations which can be found everywhere in Europe. The photos were partly taken on train travels across Europe.
Austria

Cultivation up to the forest edge, a buffer strip is missing.

The field is cultivated up to the border of the hedge, which therefore is negatively influenced by pesticides and fertilisers.
Belgium

Fertiliser and pesticide run-offs from directly adjacent fields negatively affect the ditch.

No field margin is left.
France

With almost no natural habitat along the ditch, fertiliser and pesticide run off directly into the waters; riparian biodiversity is absent.

Large-scale intensive agriculture bans biodiversity.
Due to the absence of a buffer strip, fertiliser and pesticide run-offs negatively affect the water, and the slope is prone to erosion.

Nearly no field margin is left.
In large-scale sprayed and fertilised cultivated areas, biodiversity is virtually absent.

Intensively used fields without marginal structures provide no base for biodiversity.
Fertiliser and pesticide run-offs from the directly adjacent field impact the fen negatively.

Agrochemicals run together in the moist depression and impair the natural habitat.
Germany

The absence of a natural riparian zone makes this stream species-poor and exposes it to agrochemical run-offs.

Large structure-less agricultural landscapes lack natural habitats for agrarian species and are of poor recreational value for humans.
Poland

Natural habitat of the depression was removed to obtain a large continuous cultivation area.
2. Ecological improvements through the EFAs

On the following pages we have drafted typical agri-environmental situations that could be improved with the help of EFAs. The examples show several things:

- EFAs can be both, unharvested parts of parcels (e.g. flower strips, hedges) and harvested extensive cultures (e.g. extensive cereal crops, grass buffer strips).
- EFAs will have positive effects on biodiversity and in most of the presented examples synergy effects on other environmental goods (such as water quality, soil erosion, prevention of chemical run-offs etc.).
- EFAs can be placed and adapted according to the different landscapes and environmental situations. While the extent of the EFAs should be the same all over Europe (≥ 7 %), the kind of EFAs and the distribution can be region-, landscape- or even farm-specific.

A good and adequate implementation requires a farm specific approach and planning which should be supported by advice, planning and management measures (to be supported via 2nd pillar). Also specific management measures on the EFAs like seeding of flower mixtures or specific cereal cropping in wide rows for habitat protection of birds or game require agri-environmental measures (AEM).
A flower strip provides food resources and nesting space for many species and buffers agrochemical influences on the natural habitat.
Flower strips and hedge create a species rich buffer zone around the ditch.

Fertiliser and pesticide run-offs from directly adjacent fields negatively affect the ditch.
Strips of extensive cultures with wide row spacing provide habitats for biodiversity.

In large-scale sprayed and fertilised cultivated areas, biodiversity is virtually absent.
A grassland belt around the fen acts as a buffer against agrochemical run-offs.

Fertiliser and pesticide run-offs from the directly adjacent field impact the fen negatively.
Implementation on landscape level - Current state

Cleared landscape, nearly bare of landscape elements

How it could look like

extensive cereal cropping

flowering plots

enhancement of existing landscape elements
Implementation on landscape level - Current state

Threats of some sensible sites by intensive cultivation

How it could look like
3. Examples of possible EFA-types - how to make EFAs one success factor of the greening

In the following paragraph some examples of possible EFA-types are presented. They can be divided into
a) In-crop-EFAs and
b) Off-crop-EFAs.

Both, in-crop- and off-crop-EFAs are important to enhance the ecological services in the agricultural landscape.

After showing examples of possible EFAs we describe the criteria and side conditions for their definition and summarize key points for a good and adequate implementation of the EFAs in the greening regulations.

a) In-crop-EFAs

Please note, that the given examples are only proposals; they derive from investigations on this topic in Germany.

Extensive cereal growing in wide rows, without fertiliser and pesticides → good living conditions for birds, game and wild plants.
Mixed cultures, here spelt with gold of pleasure (left) and rye with lentils (right), grown without fertiliser and pesticides.

Extensive cultures, here flax (left) and red clover (right).

Seldom cultures, here emmer.
Flower strips, multiannual (left) and annual (right): They close the gap for pollinating insects like wild bees in summer (during and after harvest) and in autumn when nectar resources in the agricultural landscape become scarce. Moreover they can be harvested late in season or in winter and the biomass can be used for pellet production. However, parts of the vegetation should be left unharvested over winter in order to provide shelter for game and other animals.

To be excluded: high and dense growing cultures like Maize, Miscanthus, Szarvasi-grass etc., because these cultures do not provide the intended biodiversity effects due to their high and dense structure.

b) Off-crop-EFAs

The off-crop EFAs are at least as important as the in-crop-EFAs - and sometimes it is difficult to differentiate between both types: e.g. buffer strips qualify as off-crop due to their location at the margin of fields. However, they can or shall be mown and the biomass can or shall be used, either as fodder or for energy or manure. Below, a few examples for off-crop EFAs are given.

Buffer strip along a water course (left) and self-greened set-aside on a poor soil (right).
Criteria and framework conditions for the definition of the EFAs

It is important to clearly state the criteria and framework conditions for the recognition / approval of EFAs. As for reasons of the WTO-regulations the EFAs cannot be defined as certain cultures, they need to be defined via the extensive management requirements or restrictions, respectively. These management requirements should be the following:

- **No application of fertilisers and of pesticides**
  → in order to enable the existence of a broad community of plants and animals;

- **Soil cultivation and harvest excluded between 15\(^{th}\) of April and 1\(^{st}\) / 15\(^{th}\) of August**
  → in order to achieve undisturbed living conditions for game and wild animals and create the possibility to rear the young;

- **Ploughing / stubble clearing only after 30\(^{th}\) of November**
  → in order to allow game, birds, bees and other insects to feed in the critical season of late summer and autumn;

- **No irrigation**
  → in order to assure natural living conditions and not to consume water resources;

- **Wide rows in EFA-cultures which are similar to normal cultures**
  e.g. in cereal cropping: wide rows of 25 cm instead of normal 10-13 cm
  → in order to achieve less dense stands of the cultures (important for birds and plant diversity) and in order to facilitate controls of the EFA-parcels (wide rows in cereals are a criteria easily to be controlled in addition to the ban of fertilisers and pesticides).
Key points for a good and adequate implementation of EFAs in the regulations

We summarize the key points for a good and adequate implementation of the EFAs in the greening regulations:

- The extent of the EFAs shall be the same all over Europe (≥ 7 %), whereas the kind of EFAs can be region-, landscape- or even farm-specific (based on minimum standards, see criteria for definition of EFAs).

- The EFAs shall consist of a range of different elements (landscape elements, terraces, buffer strips) and extensive crops such as extensive cereal cropping in wide rows, flower mixtures, seldom crops (e.g. lentils, flax). The main focus must be a distinctive effect on biodiversity.

- Agri-Environmental Measures (AEMs) shall be offered for the funding of
  a) regionally adapted specific measures with focus on biodiversity on the EFAs
  b) agri-environmental planning and advice for the implementation of EFAs on farms which contribute greatly to the effectiveness of EFAs with respect to biodiversity and care for other natural resources but which need more effort from the farmers and thus need funding to be carried out.

- The budget needed in the 2nd pillar for implementing a good and adequate EFA-management and other measures of overarching European interest (see next section) comprises at least 15 % of the 1st pillar payments. This part of the 1st pillar budget should be allocated earmarked for these purposes or shifted earmarked to the 2nd pillar (for a 100 % EU-support).

- Many farmers are in principle willing to contribute to the implementation of EFAs if they are rewarded in an adequate way for the management. They do not want to fulfil a pure obligation and they do not want to accept a reduced baseline for agri-environmental payments. Therefore, additional payments for specific AEMs are necessary.

The main points and the listed criteria are kept very short in this brochure in order to give a mainly photo-illustrated overview; however, there is much background information available (see references).
Outlook

The CAP reform proposals of the European Commission from October 2011 are a good starting point for a greener CAP but they need some crucial improvement in order to be effective and to deliver the full range of the expected effects. The Ecological Focus Areas can be one of the most important points within a greener CAP if implemented in good quality and well managed. In this respect, it is important to support them with adequate AEMs.

While this brochure concentrates on the implementation of EFAs, the management of other areas of European interest like Natura 2000 management and the management of species rich permanent pasture should not be forgotten. The same logic as for EFA-support applies also to these sites: not only the pure maintenance of permanent pasture should be granted, but the farmers should also be given positive incentives for an extensive management. This could be the heart of a consistent greening policy of the CAP: beside the obligation for implementing EFAs and maintaining permanent pastures targeted measures of overarching European interest like EFA-management, Natura2000-areas and extensive permanent pastures of high nature value need a full 100 %- EU-support in order to become well implemented and adapted regionally.

By means of positive incentives given to the farmers and to the Member States, an adequate and sufficient extent of these AEMs can be programmed in the 2nd pillar and put in practice. The measures and accompanying planning and management support can be targeted region- and farm-specific.

If farmers, Member States, agricultural and environmental bodies and associations work together on this issue, good results in form of measurable and visible effects on biodiversity in European agricultural land will be possible.

References


For further information please contact the authors.