FOOD & BIODIVERSITY

Legislation on biodiversity and agriculture

International conventions and European legislation

Content

Introduction

Protecting biological diversity is an important goal of the European Union. The **EU Biodiversity Strategy** aims to halt the loss of biodiversity and ecosystem services in the EU and to help stop biodiversity loss globally. Since the adoption of the Birds Directive in April 1979, the EU has been committed to the protection of nature and has developed new legislation. Today, several laws at EU level aim to protect nature and biodiversity.

As micro-enterprises, farmers are also subject to legal conformity, i.e. they must be familiar with and comply with the respective laws and regulations of the European Union. For example, the European Union's Common Agricultural Policy (CAP) is the basic legal framework for agriculture and therefore important for farmers. Since its last revision, the CAP has also focused on the protection of biological diversity. The Habitats Directive and the Birds Directive for the management of Natura 2000 sites have an impact on agriculture where they call for the reintroduction of compatible farming systems or the adaptation of existing practices to contribute to the conservation of the habitats and species for which the site has been designated.

The aim of this document is to explain the legislation on biodiversity protection in order to show advisors from standard organisations and food companies, certifiers and product and quality managers of companies, which legal bases can be used to protect and promote biodiversity in agriculture. Further information and links to legal texts, interesting websites and publications can be found in the Knowledge Pool of **the LIFE Food & Biodiversity** Project.

The European Union has five different instruments of legislation available; three of them are legally binding:

- **Regulation:** common regularisation with immediate domestic validity in every EU Member State
- **Directive:** common regularisation, which has to be transformed to national law by the Member States within a certain time limit. The directive is binding with respect to the aim. The selection of legislative instrument and amount of resources are the responsibility of the Member States.
- **Decision:** binding regularisation in single cases. The decision is only obligatory for the therein named target group.

European legislation regarding biodiversity is influenced significantly by **international conventions.** International conventions are **binding treaties or agreements** between states that have signed them. When the UN General Assembly adopts a convention, it creates international norms and standards. Once a convention is adopted by the UN General Assembly, member states can then ratify the convention, promising to uphold it. The most important Conventions for the protection of biodiversity will be described in the following.

International Conventions

The following is a compilation of the most important international conventions that directly or indirectly relate to biological diversity. The conventions are briefly described and an attempt is made to establish their connection to agriculture.

1. Protection of Habitats and Biodiversity

1.1. Convention on Biological Diversity (Rio Convention)

www.cbd.int/

The Convention on Biological Diversity (CBD, Biodiversity Convention) is a multilateral treaty for the development of national strategies for the conservation and sustainable use of biological diversity. The CBD sets out general objectives and guidelines. Each Contracting Party is developing own national strategies, plans or programmes.

In November 1988 a notion of an international convention on biodiversity was conceived at a United Nations Environment Programme (UNEP) Ad Hoc Working Group of Experts on Biological Diversity. The CBD was opened for signature at the Earth

Summit in Rio de Janeiro 1992 and entered into force on 29 December 1993. The convention documented for the first time in international law that the conservation of biodiversity is "*a common concern of humankind*". The Convention has 196 parties, which includes 195 states and the European Union.

"`Biological diversity´ means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." (Convention on Biological Diversity, Article 2).

The Convention on Biological Diversity has **three main objectives**:

1. The conservation of biological diversity (or biodiversity)
2. The sustainable use of the components of biological diversity
3. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

Supplementary agreements to the Convention:

1.1.1. Cartagena Protocol on Biosafety

The aim is to ensure that the transfer, handling and use of living organisms resulting from modern biotechnology do not have adverse effects on biological diversity or human health, while specifically focusing on transboundary movements.

1.1.2. Nagoya Protocol on Access and Benefit-sharing (ABS)

The Nagoya Protocol (Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity) aims to create greater legal certainty and transparency for both providers and users of genetic resources. It will establish more predictable conditions for access to genetic resources and helps to ensure benefit sharing when genetic resources leave the contracting party providing the genetic resources.

At the adoption of the Nagoya Protocol, the **Aichi Biodiversity Targets** for global biodiversity were formulated:

- **Strategic Goal A**: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use
- **Strategic Goal C:** Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- **Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services
- **Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building

The governing body of the Convention (Conference of the Parties (COP)) has established seven thematic programmes of work. Each programme stablishes a vision for, and basic principles to guide future work. They also set out key issues for consideration, identify potential outputs, and suggest a timetable and means for achieving these. One of these seven thematic programmes refers to **agricultural biodiversity**. This is a multi-year programme of work aiming to:

- promote the positive effects and mitigate the negative impacts of agricultural systems and practices on biodiversity in agro-ecosystems and their interface with other ecosystems;
- promote the conservation and sustainable use of genetic resources of actual and potential value for food and agriculture;
- promote the fair and equitable sharing of benefits arising out of the use of genetic resources.

The programme consists of four elements (assessment, adaptive management, capacity-building and mainstreaming) and three cross-cutting initiatives (on pollinators, soil biodiversity, biodiversity for food and nutrition and Genetic Use Restriction Technologies (GURTS), to be implemented.

1.2. Convention on Wetlands (Ramsar Convention)

www.ramsar.org

The convention on Wetlands (before: Convention on Wetlands Importance especially as Waterfowl Habitat) provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

The Ramsar Convention was adopted in the Iranian city of Ramsar in 1971. The Convention´s member countries cover all geographic regions of the planet. The Contracting Parties commit to:

- work towards the wise use of all their wetlands;
- designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management;
- cooperate internationally on transboundary wetlands, shared wetland systems and shared species.

Today, the **Ramsar List** is the world's largest network of protected areas. There are over 2,200 Ramsar Sites on the territories of 169 Ramsar Contracting Parties across the world, covering more than 2.1 million square kilometres. The Member States are expected to manage their Ramsar Sites so as to maintain their ecological character and retain their essential functions and values for future generations – this might also affect agricultural land.

The **Agriculture & Food Heritage Thematic Group** within RAMSAR is concerned with sustainable traditional wetland agricultural knowledge and practices, as well as with long-established sustainable water and wetland management systems and food cultures related to wetlands. The group is developing 'lessons learned' concerning cultural aspects of food and agriculture relating to wetlands, including suggestions on how these could be integrated into the Convention's policy and practice, and in turn how wetland-related perspectives could be integrated into relevant fields of cultural policy and practice.

2. Protection of Species

2.1. Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)

www.cms.int

The Convention on the Conservation of Migratory Species of Wild Animals (CMS) provides a global platform for the conservation and sustainable use of migratory animals and their habitats. CMS brings together the States and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.

Wild animals require special attention because of their importance from the environmental, ecological, genetic, scientific, recreational, cultural, educational, social and economic points of view. To avoid any migratory species becoming endangered, the parties to the Convention endeavours:

- to conserve or restore the habitats of endangered species;
- to prevent, remove, compensate for or minimize the adverse effects of activities or obstacles that impede the migration of the species; and
- to prevent, reduce or control factors that are endangering or are likely to further endanger the species

According to CMS, a number of agricultural practices can threat migratory species e.g. fences and other obstacles, conversion, overgrazing and pollution in aquatic areas from agricultural runoff. In some areas, migratory species must compete with livestock for suitable grazing areas, in addition overgrazing is leading to habitat damage. Agricultural practices may also influence migratory insects. Seven CMS Instruments intersect with the CBD agricultural biodiversity work programme. (Convention on the Conservation of Migratory Species of Wild Animals (2002): Cooperation with other Bodies CBD/CMS Joint Work Programme (2002-2005), p. 8)

2.2. Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention)

www.cites.org/

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), also known as the Washington Convention, is a multilateral treaty that aims to ensure that international trade in specimens of wild animals does not threaten their survival.

It was drafted as a result of a resolution adopted in 1963 at a meeting of members of the International Union for Conservation of Nature (IUCN). The Convention was finally agreed at a meeting of representatives of 80 countries in Washington D.C., USA, on 3 March 1973, and on 1 July 1975 CITES entered in force. Today, it harmonies varying degrees of **protection to more than 35.000 species of animals and plants**. 183 parties are member of the convention.

CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. **Appendix I** of the Convention includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances. **Appendix II** includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival. **Appendix III** contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

3. Plant Protection

3.1. International Treaty on Plant Genetic Resources for Food and Agriculture

www.fao.org/plant-treaty

The objectives of the Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use.

The Treaty was adopted by the 31. of the Conference of the Food and Agriculture Organization of the United Nations (FAO) on 3 November 2001 and entered into force on 29 June 2004. It aims at:

- recognizing the enormous contribution of farmers to the diversity of crops that feed the world;
- establishing a global system to provide farmers, plant breeders and scientists with access to plant genetic materials;
- ensuring that recipients share benefits they derive from the use of these genetic materials with the countries where they have been originated.

The Treaty covers all plant genetic resources for food and agriculture, while its Multilateral System of Access and Benefit-sharing (ABS) covers a specific list of 64 crops and forages. The Treaty also contains provisions on farmers' rights. It calls for the traditional knowledge of these farmers to be protected, their participation in national decision-making processes to be increased and for them to share in the benefits of using these resources.

3.2. International Plant Protection Convention

www.ippc.int

The IPPC aims to protect world plant resources, including cultivated and wild plants by preventing the introduction and spread of plant pests and promoting the appropriate measures for their control.

The International Plant Protection Convention (IPPC) is a 1951 multilateral treaty deposited with the Food and Agriculture Organization of the United Nations (FAO). The IPPC provides the mechanisms to develop the **International Standards for Phytosanitary Measures (ISPMs)**, and to help countries to implement the ISPMs and the other obligations under the IPPC, by facilitating the national capacity development, national reporting and dispute settlement.

The Commission of Phytosanitary Measures (CPM) (governing body of the IPPC) agreed on the following strategic objectives:

- protecting sustainable agriculture and enhancing global food security through the prevention of pest spread;
- protecting the environment, forests and biodiversity from plant pests;
- facilitating economic and trade development through the promotion of harmonized scientifically based phytosanitary measures, and
- developing phytosanitary capacity for members to accomplish the preceding three objectives.

EU Legislation

The following is a compilation of the most important European regulations relating to biodiversity and agriculture. The text attempts to illustrate the interrelation of the laws between biodiversity conservation and agriculture. For a better overview, the laws are sorted into subject areas.

4. Protection of Nature and Biodiversity

4.1. Natura 2000

Natura 2000 comprises special areas of conservation designated by EU countries. It is set up by the Habitats Directive and includes the special protection areas classified under the Birds Directive (Directive 2009/147/EC).

4.1.1. Conservation of natural habitats and of wild fauna and flora (Habitats Directive)

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01992L0043-20070101

The European Union seeks to contribute to ensuring biodiversity in the European Union by the conservation of natural habitats, and wild fauna and flora species in the territory of the Member States. The directive sets up the the 'Natura 2000' network. Natura 2000 comprises special areas of conservation designated by EU countries under this directive.

The directive's Annexes I and II list the **types of habitats and species of special areas of conservation**. Some of these are defined as 'priority' habitats or species in danger of disappearing. Annex III lists the criteria for selecting sites.

Once special areas for conservation are designated, EU countries must **guarantee the conservation of habitats in these areas and avoid their deterioration and any significant disturbance to species**. Any plan or project that can have a significant impact on a Natura 2000 site should be a subject of appropriate assessment.

4.1.2. Conservation of wild birds (Birds Directive)

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531209279455&uri=CELEX:32009L0147

"This Directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation. It shall apply to birds, their eggs, nests and habitats."

Measures of the Directive include:

- creation of protected areas;
- upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones;
- re-establishment of destroyed biotopes;
- creation of biotopes.

EU countries must create special protection areas (SPAs) for threatened species and migratory birds in the birds' natural area of distribution. The SPAs form part of the Natura 2000 network of protected ecological sites.

According to the European Commission Natura 2000 sites are not strictly protected areas in which all activities are systematically excluded: for example, **agricultural land accounts for about 40 % of the total area of Natura 2000**. Many of the habitats and species protected by the Habitats and Birds Directives are even dependent on or associated with agricultural practices. In some of these areas, existing farming systems and methods are already compatible with the conservation of the species and habitats for which the area has been designated under Natura 2000 and the focus will be on finding ways to further support these farming methods. In other cases, traditional farming methods have already been abandoned or converted to another form of agriculture that is less compatible with nature. In this case, it will be necessary to find ways of reintroducing compatible farming systems or to adapt existing practices so that they can contribute to the conservation of the habitats and species of Community interest for which the site has been designated.

Protection measures may include both site-specific measures (i.e. management measures and/or management restrictions) and horizontal measures applicable to many Natura 2000 sites in a wider area (e.g. measures to reduce nitrate pollution or to regulate hunting or resource use). (European Commission (2014): Farming for Natura 2000)

4.2. Prevention and management of the introduction and spread of invasive alien species

Regulation (EU) No 1143/2014 of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531227454807&uri=CELEX:32014R1143

"This Regulation sets out rules to prevent, minimise and mitigate the adverse impact on biodiversity of the introduction and spread within the Union, both intentional and unintentional, of invasive alien species."

Invasive Alien Species (IAS) are animals and plants that are introduced accidentally or deliberately into a natural environment where they are not normally found, with serious negative consequences for their new environment.

The European Commission adopted its first **list of invasive alien species (IAS)** of 'Union concern'. Species on this list may not be intentionally brought into the EU, nor may they be kept, bred, transported to, from or within the EU, sold, grown or released into the environment.

Within 18 months of the listing of species, EU countries need to establish **management measures** for IAS. When an ecosystem has been degraded, damaged or destroyed by an IAS of Union concern, the EU countries should carry out measures to assist in the recovery of this ecosystem.

On the one hand, IAS as one major cause of crop loss and present significant threats to global agriculture, although distribution of the threats vary between countries and regions. On the other hand, the most relevant disturbance factor for the spread of invasive alien species is among others the expansion of agriculture. (Early, R. et al. (2016): Global threats from invasive alien species in the twenty-first century and national response capacities) Therefore, farmers are urged to be vigilant for invasive species: Farmers should inspect e.g. their equipment, do not grow invasive alien species on the site and report sightings of non-native species. (Center for Invasive Species and Ecosystem Health: I am a Rancher or Farmer, Why should I care about invasive species?)

4.3. Protection of species of wild fauna and flora by regulating trade therein

Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31997R0338

The aim of this Regulation is to ensure the protection and conservation of endangered species of wild fauna and flora, through the control of trade with these species by establishing conditions for their importation, exportation or re-exportation and on their movement within the European Union (EU). This Regulation applies in compliance with the objectives, principles and provisions of the CITES Convention.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has to be implemented uniformly in all EU countries. CITES is implemented in the EU through EU wildlife trade regulations. EU countries apply rules on the import and export of endangered species of animals and plants, and products derived from them.

The import and export of specimens of endangered species into the EU requires a permit issued by an authority of the EU. Categories of species are outlined in Annexes A to D of the regulation. Trade in species of some species (Annex A) is prohibited.

4.4. Environmental liability

Directive 2004/35/CE of the European Parliament and of the Council of 12 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531235417981&uri=CELEX:32004L0035

The purpose of this Directive is to establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.

Environmental damage is defined as:

- damage that affects the environmental status of water resources, as defined in the EU Water Directive and the Marine Environment Strategy Directive
- damage to protected species and natural habitats that adversely affects conservation as defined in the Directive on the conservation of wild birds and the Natural Habitats Directive;
- damage to land creating a significant risk to human health

Companies, including farmers who cause environmental damage, are liable for this and must take the necessary precautionary or remedial measures and bear all associated costs.

5. Agriculture

5.1. Common Agricultural Policy (CAP)

Launched in 1962, the EU-Common Agricultural Policy (CAP) presents the legal framework for agriculture in the European Union. The CAP regulates subsidies to farmers, the market protection of agricultural goods and the development of rural regions in Europe.

The CAP aims to:

- increase agricultural productivity by promoting technical progress and ensuring the optimum use of the factors of production, in particular labour;
- ensure a fair standard of living for farmers;
- stabilise markets;
- assure the availability of supplies;
- ensure reasonable prices for consumers.

Since its creation, the CAP has always been adapted to respond to challenges, e.g. changing economic circumstances and citizens' requirements and needs. Significant reforms have been in 2003 and during the CAP Health check in 2008. Since 2003 the reform cuts the link between subsidies and production. Farmers now receive an income support, but still need to fulfil food safety, environmental, animal health and welfare standards.

The "CAP towards 2020: `Meeting the food, natural resources and territorial challenges of the future` sets out potential challenges, objectives and orientations for the Common Agricultural Policy" after 2013. The CAP was reformed to strengthen the competitiveness of the sector and to promote sustainable farming and innovation.

Figure (1): Nine objectives of the future CAP
Source: European Commission: Future of the common agricultural policy, https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en

On 1 June 2018, the European Commission presented legislative **proposals on the future of the CAP for the period after 2020**. The legislative proposals were based on a public consultation on the future of the CAP in 2017.

Based on nine objectives, the future CAP wants to "*continue to ensure access to high-quality food and strong support for the unique European farming model with an increased focus on the environment and climate, supporting the transition towards a more sustainable agricultural sector and the development of vibrant rural areas*" (European Commission).

Figure (1) shows the nine objectives of the future CAP.

Four main regulations govern the CAP

5.1.1. Direct payments to farmers under support schemes

Regulation (EU) No 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation (EC) No 637/2008 and Council Regulation (EC) No 73/2009

https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32013R1307

This Regulation establishes common rules on payments granted directly to farmers ("direct payments"); and specific rules concerning additional payments for farmers.

Direct payments are a type of income support for farmers. This support ensures farmers having a steady income, and is unrelated to how much they produce.

Direct Payments are the “first pillar” of the EU support funds. The Regulation adjusts direct payments to farmers which – if the requirements are met – are granted per hectare of farmland. Only ‘active farmers’ with farming as their main business can apply for support. Other operators (e.g. airports, sports grounds) will not qualify.

Direct payments to farmers are paid through support schemes in each of the EU countries. The Regulation (EU) No 1307/2013 changed how these schemes work. EU Countries must dedicate a certain proportion of their CAP funding allocation to compulsory support schemes:

- All EU countries must move towards a uniform payment per hectare from 2015 (a ‘basic payment scheme’).
- **Green payment** per hectare for using methods that help the climate and environment (30 % of national funding allocation).
- Young farmer payment (for farmers under 40 who started farming up to 5 years before claiming support) for up to 5 years.

There are also some optional support schemes. EU countries can choose to:

- support smaller farms by paying a higher amount on the first 30 hectares (‘ redistributive payment ’);
- grant additional payments for areas with natural constraints;
- grant limited amounts of production-related support (‘ coupled support ’ - payments linked to specific crops or types of livestock) to help maintain production in sectors in difficulty;
- offer a simplified scheme for small farmers - annual payment of up to €1,250;
- move up to 15 % of their allocation for direct payments to rural development schemes - or do the reverse.

Direct payments are tied to the fulfilment of certain standards ("**Cross Compliance** (Introduced in 2003)") in the fields of environmental protection, food and feed safety and animal health and protection. In order to receive payments, farmers shall respect a set of basic rules. Farmers that are not respecting EU law on environmental, public and animal health, animal welfare or land management will receive reduced payments.

Direct **green payments** account for 30 % of the direct payment budgets of EU countries. Farmers who receive an area payment must use various practices that benefit the environment and the climate. They include:

- diversifying cultures
- Maintenance of permanent grassland
- 5 % of arable land should be used for "ecologically advantageous elements" ("ecological priorities").

5.1.2. Support for rural development

Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531398860449&uri=CELEX:32013R1305

Regulation (EU) No 1305/2013 sets out how the European Agricultural Fund for Rural Development (EAFRD) aims to develop the agricultural sector over the period 2014-2020.

EAFRD is the second funding pillar of the CAP and aims to improve competitiveness in agriculture while ensuring that natural resources are managed sustainably and that measures to tackle climate change are implemented effectively. It also ensures that rural European areas receive support for development, which includes creating new jobs and protecting existing ones. In 2015 the EAFRD's budget was set at €99.3 billion. At least 30 % of this **must be used for measures to protect the environment and combat climate change** and 5 % is reserved for developing local strategies.

EU countries and regions ca focus on issues of particular importance in their area like young farmers, small farms, mountain areas, women in rural areas, climate change mitigation/adaptation and biodiversity or short supply chains.

5.1.3. Financing, management and monitoring of the common agricultural policy

Regulation (EU) No 1306/2013 of the European Parliament and of the Council of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008

https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32013R1306

This Regulation lays down rules for spending under the two main CAP funds: European Agricultural Guarantee Fund (EAGF) (mainly finances direct payments to farmers and agricultural market support measures) and European Agricultural Fund for Rural Development (EAFRD).

The regulation updated the rules for **cross-compliance**, requires EU countries to set up a farm advisory system to help farmers understand, the CAP's **cross-compliance** and greening obligations; and allows the Commission to suspend payments to EU countries if serious deficiencies in their national control systems are detected.

5.1.4. Common organisation of the markets in agricultural products

Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007

https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32013R1308

The Common Market Organisation (CMO) Regulation "establishes a common organisation of the markets for agricultural products (…)."

The CMO provides a safety net for agricultural markets through the use of market support instruments (e.g. public intervention and private storage), specific measures and aid for certain sectors (in particular fruit and vegetables and wine). It shall seek to promote cooperation through producer organisations and inter-branch organisations. The Regulation also lays down minimum quality requirements (marketing standards) for a number of products, rules for trade in agricultural products and specific competition rules.

5.2. Sustainable use of pesticides

Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531231133330&uri=CELEX:32009L0128

This Directive establishes a framework to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment. The Directive promotes the use of** integrated pest management **and of alternative approaches or techniques such as non-chemical alternatives.

The directive states that EU countries must:

- adopt national plans setting objectives, targets, measures and timetables to reduce health and environmental risks from pesticide use;
- ensure training for all professional users, distributors and advisors;
- regular inspections for pesticide application equipment (every 5 years up to 2020 and every 3 years thereafter);
- prohibit aerial spraying;
- inform the general public and promote awareness-raising programmes about the potential risks from pesticides;
- protect water, especially drinking water;
- ensure that the use of pesticides is reduced or banned in certain areas such as public parks, playgrounds, sports fields or near healthcare facilities;
- require professional users to follow safety precautions when handling and storing pesticides and treating their packaging and remnants;
- take all necessary measures to promote low pesticide pest management.

Integrated pest management means the careful examination of all available plant protection methods and the subsequent integration of appropriate measures to prevent the development of populations of harmful organisms. The use of plant protection products and other forms of intervention should be kept at an economically and ecologically acceptable level and risks to human health and the environment should be reduced. Integrated pest management emphasises the growth of a healthy crop with the least possible disruption to agroecosystems and promotes natural pest control mechanisms.

The prevention of harmful organisms should be achieved or supported among other options especially by:

- crop rotation,
- use of adequate cultivation techniques (e.g. stale seedbed technique, sowing dates and densities)
- use, where appropriate, of resistant/tolerant cultivars and standard/certified seed and planting material,
- use of balanced fertilisation, liming and irrigation/drainage practices,
- protection and enhancement of important beneficial organisms, e.g. by adequate plant protection measures or

5.3. Protective measures against the introduction into the Community of organisms harmful to plants

Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531233322960&uri=CELEX:32000L0029

This Directive aims to protect plants from harmful organisms (pests and diseases) by preventing their import into the EU and limiting their spread if they do enter.

The term harmful organisms is defines as pests of plants or of plant products, which belong to the animal or plant kingdoms, or which are viruses, mycoplasmas or other pathogens.

"(4) The protection of plants against such organisms is absolutely necessary not only to avoid reduced yields but also to increase agricultural productivity."

5.4. Landraces and varieties which are naturally adapted to the local and regional conditions

Directive 2008/62/EC of the commission of 20 June 2008 providing for certain derogations for acceptance of agricultural landraces and varieties which are naturally adapted to the local and regional conditions and threatened by genetic erosion and for marketing of seed and seed potatoes and those landraces and varieties

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531230763036&uri=CELEX:32008L0062

This Directive lays down certain derogations in relation to the conservation in situ and the sustainable use of plant genetic resources through growing and marketing.

"(2) In order to ensure in situ conservation and the sustainable use of plant genetic resources, landraces and varieties which are naturally adapted to local and regional conditions and threatened by genetic erosion (conservation varieties) should be grown and marketed even where they do not comply with the general requirements as regards the acceptance of varieties and the marketing of seed and seed potatoes. In order to achieve that objective it is necessary to provide for derogations as regards the acceptance of conservation varieties, for inclusion in the national catalogues of varieties of agricultural plant species as well as for the production and marketing of seed and seed potatoes of those varieties."

Member States can accept in the national catalogues of varieties of agricultural plant species the landraces and varieties referred to in Article 1 of the Directive. These landraces or varieties are referred as "conservation species".

5.5. Vegetable landraces and varieties which have been traditionally grown

Directive 2009/145/EC providing for certain derogations, for acceptance of vegetable landraces and varieties which have been traditionally grown in particular localities and regions and are threatened by genetic erosion and of vegetable varieties with no intrinsic value for commercial crop production but developed for growing under particular conditions and for marketing of seed of those landraces and varieties

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531316996137&uri=CELEX%3A32009L0145

As regards to the Directive 2002/55/EC on vegetables species, this Directive lays down certain derogations, in relation to the conservation in situ and the sustainable use of plant genetic resources through growing and marketing.

The Directive states:

- *"for acceptance for inclusion in the national catalogues of varieties of vegetable species, as provided for in Directive 2002/55/EC, of landraces and varieties which have been traditionally grown in particular localities and regions and threatened by genetic erosion,*
- *for acceptance for inclusion in the catalogues referred to in point (a) of varieties with no intrinsic value for commercial crop production but developed for growing under particular conditions*
- *for the marketing of seed of such conservation varieties and varieties developed for growing under particular conditions. "*

5.6. Marketing of vegetable seed

Council Directive 2002/55/EC of 13 June 2002 on the marketing of vegetable seed

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531476528667&uri=CELEX:32002L0055

This Directive seeks to regulate the marketing of vegetable seed in the Member States of the EU. It does not apply to vegetable seed intended for export.

According to the Directive:

- *"1. Member States shall provide that vegetable seed may no be certified, verified as standard seed and marketed unless the variety is officially accepted in one or more Member States.*
- *2. Each Member State shall establish one or more catalogues of the varieties officially accepted for certification, verification as standard seed and marketing in its territory. The catalogues shall be subdivided according to varieties."*

5.7. Marketing of fodder plant seed

Council Directive 66/401/EEC of 14 June 1966 on the marketing of fodder plant seed

https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31966L0401

This Directive shall apply to fodder plant seed marketed within the Community.

Member States shall provide that several seeds may not be placed on the market unless it has been officially certified as "basic seed" or "certified seed". Each Member State is obliged to establish a list of the varieties of fodder plant officially accepted for certification in its territory.

5.8. Organic production and labelling of organic products

Council Regulation 834/2007 of 28 June 2007 on organic production and labelling of organic products

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32007R0834

This regulation sets out the objectives and principles applicable to organic production and illustrates the rules on production, labelling, controls and trade with third countries.

"Organic production is an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes. The organic production method thus plays a dual societal role, where it on the one hand provides for a specific market responding to a consumer demand for organic products, and on the other hand delivers public goods contributing to the protection of the environment and animal welfare, as well as to rural development." (Council Regulation 834/2007 (1).

- Organic plant production must establish a sustainable management system for agriculture that:
- respects nature's systems and cycles and sustains and enhances the health of soil, water, plants and animals and the balance between them;
- contributes to a high level of biological diversity;
- makes responsible use of energy and the natural resources, such as water, soil, organic matter and air;
- respects high animal welfare standards and in particular meets animals' species-specific behavioural needs.

5.9. Genetically modified food and feed

Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32003R1829

The Regulation lays down rules on how genetically modified organisms (GMOs) are authorised and supervised, and on how genetically modified food and animal feed is labelled.

The Regulation aims to protect:

- people's lives and health
- animal health and welfare
- environmental and consumer interests.

Food and feed containing GMOs should be clearly labelled.

6. Air

6.1. Agricultural and forestry vehicles

Regulation (EU) No 167/2013 of 5 February 2013 on the approval and market surveillance of agricultural and forestry vehicles

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531237114759&uri=CELEX:32013R0167

"1.This Regulation shall apply to agricultural and forestry vehicles, as described in Article 4, designed and constructed in one or more stages, and to systems, components and separate technical units, as well as parts and equipment, designed and constructed for such vehicles."

In order to reduce the atmospheric pollution caused by agricultural or forestry tractor engines, the European Union is laying out rules on safety and environmental protection as well as administrative procedures for the type-approval of tractors and other agricultural and forestry vehicles.

7. Soil

7.1. Fertilizer Regulation

Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilizers

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531317696961&uri=CELEX:32003R2003

This scheme defines, in particular, the provisions relating to the placing of fertilisers on the market i.e. the conditions for designating "EC fertilisers", as well as the provisions regarding their labelling and packaging. The Regulation covers only mineral fertilisers. Other fertilisers are governed by EU countries' national legislation.

In its Annex I, the regulation lists fertiliser types according to their specific characteristics. Once a fertiliser meets this type designation it may bear the letters 'EC'. So an "EC fertiliser" meets the type designation listed in the regulation. To achieve the "EC" status a fertiliser must provide nutrients effectively, not harm human, animal or plant health or the environment and demonstrate it has been subject to the relevant sampling, analysis and test methods. This EC designation guarantees farmers that the fertilisers contain a minimum nutrient content and are safe to use.

The European Union is thus simplifying Community legislation on the harmonisation of Member States' legislation in the field of fertilisers by bringing all the existing provisions in this field under the one instrument. The objective is to ensure the free movement of these products within the European Union.

7.2. Sewage sludge Directive

Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31986L0278

The purpose of this Directive is to regulate the use of sewage sludge in agriculture in such a way as to prevent harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sewage sludge.

The directive sets limits on the concentrations allowed in soil of 7 heavy metals that may be toxic to plants and humans:

- cadmium
- copper
- nickel
- lead
- zinc
- mercury
- chromium

Responsibility for ensuring farmers' use of sludge does not exceed the legal limits lies with national authorities. In some situations, sludge may not be used at all in farming:

- on grassland or forage crops that are going to be grazed by animals and for a minimum 3 weeks before crops are due to be harvested,
- on fruit and vegetable crops during the growing season,
- on soil used to grow fruit and vegetable crops that are usually in direct contact with the soil and eaten raw (applies for 10 months before the harvest and during the harvest).

8. Water

8.1. Water Framework Directive

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1531224266284&uri=CELEX:32000L0060

The purpose of the Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater, which prevents further deterioration and protects the status of aquatic ecosystems.

The aim is to attain a "good status" of all waters.

- protecting all forms of water (surface*, ground*, inland* and transitional*);
- restoring the ecosystems in and around these bodies of water;
- reducing pollution in water bodies;
- guaranteeing sustainable water usage by individuals and businesses.

On average, 44 % of total water abstraction in Europe is used for agriculture. Southern European countries use the largest percentages of abstracted water, in northern Member States, levels of water use in agriculture are much lower, but still accounting for more than 30 % in some areas. Irrigation is the source of a number of environmental concerns, such as the excessive depletion of water from subterranean aquifers, irrigation-driven erosion and increased soil salinity. Also the water quality may be negatively affected by the presence of pesticide residues, nutrients from fertilisers, or sediments from soil erosion.

According to the European Commission Protecting water quality is a key issue of the Common Agricultural Policy. The aim is to avoid water pollution through agricultural activity, mainly through a sustainable use of pesticides. (European Commission: Agriculture and water)

The legislation places clear responsibilities on national authorities.

8.2. Environmental quality standards in the field of water policy

Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0105&qid=1531225998074

This Directive sets out environmental quality standards (EQS) concerning the presence in surface water of certain substances or groups of substances identified as priority pollutants on account of the substantial risk they pose to or via the aquatic environment.

The Commission establishes environmental quality standards (EQS) so as to limit the quantity of certain substances or groups that pose a significant risk to or via the aquatic environment in the EU.

The priority substances are defined in the Water Framework Directive. Directive 2008/105/EC sets limits on the concentration of the priority substances, i.e. the quantity in water of the substances concerned must not exceed certain thresholds.

8.3. Protection of groundwater against pollution and deterioration

Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration

https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32006L0118&qid=1531226577768

This Directive is designed to prevent and combat groundwater pollution in the EU.

Its provisions include:

- criteria for assessing the chemical status of groundwater
- criteria for identifying significant and sustained upward trends in groundwater pollution levels, and for defining starting points for reversing these trends
- preventing and limiting indirect discharges (after percolation through soil or subsoil) of pollutants into groundwater

8.4. Protection of waters against pollution caused by nitrates from agricultural sources

Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources

https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31991L0676

The Directive aims to reduce water pollution from nitrates used for agricultural purposes and to prevent any further pollution.

Nitrogen is a vital nutrient that helps plants and crops to grow. However, high concentrations are harmful to people and nature and agricultural use of nitrates in organic and chemical fertilisers can be a major source of water pollution. Farming is responsible for over 50 % of total nitrogen discharges into surface waters. (EU-Lex: Fighting water pollution from agricultural nitrates)

Water pollution should be reduced trough:

- monitoring surface waters and groundwater;
- making an inventory of polluted waters or waters at risk of being polluted;
- designating vulnerable zones;
- introducing codes of **good agricultural practice** and action programmes, and reviewing at least every four years the designation of vulnerable zones and the action programmes.

Good agricultural practice (GAP) are specific methods, which create food that is safe and wholesome. There are several broadly accepted schemes that producers can adhere to.

Codes of good agricultural practice cover such activities as

- application periods,
- fertiliser use near watercourses and on slopes,
- manure storage methods,
- spreading methods and crop rotation and
- other land management measures.

Overview of the Project EU LIFE Food & Biodiversity

Food producers and retailers are highly dependent on biodiversity and ecosystem services but also have a huge environmental impact. This is a well-known fact in the food sector. Standards and sourcing requirements can help to reduce this negative impact with effective, transparent and verifiable criteria for the production process and the supply chain. They provide consumers with information about the quality of products, environmental and social footprints, the impact on nature caused by the product.

The LIFE Food & Biodiversity Project "Biodiversity in Standards and Labels for the Food Industry" aims at improving the biodiversity performance of standards and sourcing requirements within the food industry by:

A) Supporting standard-setting organisations to include efficient biodiversity criteria into existing schemes; and encouraging food processing companies and retailers to include biodiversity criteria into respective sourcing guidelines;
B) Training of advisors and certifiers of standards as well as product and quality manager of companies;
C) Implementation of a cross-standard monitoring system on biodiversity;
D) Establishment of a European-wide sector initiative.

Within the EU-LIFE Project Food & Biodiversity, a Knowledge-Pool with background information linked to agriculture and biodiversity is provided. You can access the Knowledge Pool under the following link:

www.business-biodiversity.eu/en/knowledge-pool

Author: LIFE Food & Biodiversity; Lake Constance Foundation

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