The EU Policy Regulates and Controls the Farming Practices

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Abstract: Across the world, agricultural land management has created a rich landscape diversity. Today’s countryside is a result of farming activities over the centuries. Agriculture is the main land user and the resulting high visibility leads to a widespread perception that "rural" matches with "farming". Around 775 million ha land of the European Union (50\%) is farmed. This fact alone highlights the importance of farming for the EU's natural environment. Farming and nature exercise a profound influence over each other. In the older EU member states, less than 2 \% of the active people is active in agriculture, while in the youngest ones more than 15\% is involved. There is a wide range of farming practices on very large and small farms, with or without animals, very intensive or extensive, on flat areas or in hilly and mountain regions, very specialized or mixed farms...Therefore the links between the richness of the natural environment and farming practices are complex. While many valuable habitats in Europe are maintained by extensive farming, and a wide range of wild species rely on this for their survival, agricultural practices can also have an adverse impact on natural resources. Pollution of soil, water and air, fragmentation of habitats and loss of wildlife can be the result of inappropriate agricultural practices and land use.

Environmental concerns play a vital role in the Common Agricultural Policy-CAP of the European Union, which deals both with the integration of environmental considerations into CAP rules and with the development of agricultural practices preserving the environment and safeguarding the countryside. At the end of 2008 the EU agriculture ministers reached a political agreement on the Health Check of the Common Agricultural Policy, published in Council Regulation (EC) No 73/2009 repealing Council Regulation (EC) No 1782/2003. This Health Check will modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges. Climate change, renewable energy, water management, biodiversity and dairy restructuring are crucial challenges for Europe's rural areas, agriculture and forestry.

Since its foundation by 6 countries in 1957, the EU changed in many aspects and especially in regulating and controlling agricultural matters. This contribution will give an overview of the EU CAP by referring to the relevant Commission Regulations, Directives and Recommendations and to documents prepared by the authors on the occasion of the 9 international symposia of the UASVM Cluj-Napoca.

Keywords: Common Agricultural Policy CAP, Regulation, Directive, Recommendation, Cross compliance.

INTRODUCTION

Half of the European Union's land (around 775 million ha) is farmed. This fact alone highlights the importance of farming for the EU's natural environment. Farming and nature exercise a profound influence over each other. Over centuries farmers used different methods and systems to grow and transform agricultural and horticultural products, first of all to survive and later to get a good income and lifestyle for their family. Some maintained
traditional methods, others will use GMO’s, some specialized while others keep a mixed farm, some are restricted by soil and weather conditions, some import large amounts of fertilizer, pesticides, concentrates, …some swear by organic farming, …Owing to this, farming has contributed to creating and maintaining a variety of habitats and landscapes. Farming also supports a diverse rural community that is not only a fundamental asset of European culture, but also plays an essential role in maintaining the environment in a healthy state. The links between the richness of the natural environment and farming practices are complex. While many valuable habitats in Europe are maintained by extensive farming, and a wide range of wild species rely on this for their survival, agricultural practices can also have an adverse impact on natural resources. Pollution of soil, water and air, fragmentation of habitats and loss of wildlife can be the result of inappropriate agricultural practices and land use.

At the end of 2008 the EU agriculture ministers reached a political agreement on the Health Check of the Common Agricultural Policy, highlighted in Council Regulation (EC) No Regulation 73/2009, repealing Council Regulation (EC) No 1782/2003 and establishing the principle that farmers who do not comply with certain requirements in the areas of public, animal and plant health, environment and animal welfare are subject to reductions of or exclusion from direct support. This ‘cross compliance’ system forms an integral part of Community support under direct payments and should therefore be maintained. The Health Check will modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges.

Among a range of measures, the agreement abolishes arable set-aside, increases milk quotas gradually leading up to their abolition in 2015, and converts market intervention into a genuine safety net. Ministers also agreed to increase modulation, whereby direct payments to farmers are reduced and the money transferred to the Rural Development Fund. This will allow a better response to the new challenges and opportunities faced by European agriculture, including climate change, the need for better water management, the protection of biodiversity, and the production of green energy. Member States will also be able to assist dairy farmers in sensitive regions adjust to the new market situation.

As part of the EU global climate change strategy, agriculture and forestry will be called upon to make a greater contribution to curbing greenhouse gas emissions and increasing carbon sequestration. Farming and forestry practices have an important impact on soil organic matter. Despite the importance of maintaining the organic matter content of the soil, there is evidence that decomposing organic matter in the soil is frequently not sufficiently replaced under arable cropping systems which are tending towards greater specialization and monoculture (e.g. maize). Specialization in farming has led to the separation of livestock from arable production so that rotational practices restoring soil organic matter content are often no longer a feature of farming. From this point of view, grasslands have much better sequestration capacities than arable land and is worthwhile to notice that permanent grasslands are sinks for carbon sequestration in comparison to arable land (Carlier et al. 2003).

More sustainable water management practices in agriculture will be essential to ensure sufficient quantity and quality of water for the future, and to adapt to the projected climate change impacts on water resources. Furthermore, halting biodiversity decline remains a major challenge. Support for innovation related to the above-mentioned new challenges may facilitate the implementation of these priorities. In view of the expiry of the dairy quota regime, the need for restructuring in agriculture will increase. In this context, rural development measures will be an important accompaniment to the reforms in the dairy sector.
The additional resources which will be made available as of 2010 by an increase in compulsory modulation should be devoted to reinforcing the Community action in the fields of climate change, renewable energy, water management, biodiversity and dairy restructuring. From 1 January 2010, Member States shall provide in their rural development programs, in accordance with their specific needs, the following priorities:

(a) climate change, (b) renewable energies, (c) water management, (d) biodiversity, (e) measures accompanying restructuring of the dairy sector, (f) innovation linked to the priorities mentioned in points (a), (b), (c) and (d).

The types of operations to be linked to the priorities are specified in Annex II of Council Regulation (EC) No 74/2009.

LAND USE: GRASSLANDS AND ARABLE LAND

Grasslands are and play important part in the nature. Worldwide there are around 10 billion ha of agricultural land: 4 billion ha forests, 3.5 billion ha grassland and 1.5 billion arable land. There is also 0.5 billion ha abandoned agricultural land lying in fallow and this is not a small number; it's something like a quarter of the total amount of cropland globally. The rest are canals, hedges, land roads, … 35 million hectares of agricultural land are certified according to organic standards (situation at the end of 2008). In the European Union the situation is completely different, because farmers always tried to convert forests and grassland to arable land which gave them more direct profit. Around 360 million ha arable land, 200 million grasslands and 210 million forests cover the European Union (the 28 Member States).

Half of the European Union's land is farmed and this fact alone highlights the importance of farming for the EU's natural environment. Farming has contributed over the centuries to creating and maintaining a variety of valuable semi-natural habitats. Today these shape the majority of the EU's landscapes and are home to many of the EU's richest wildlife. Farming also supports a diverse rural community that is not only a fundamental asset of European culture, but also plays an essential role in maintaining the environment in a healthy state.

Man has been exploiting mammalian herbivores for hundreds of thousands of years. Initially this exploitation was based on the consumption of meat and the use of skin, bones, teeth, horns or antlers and sinews. Only since the last 9000 years man has progressively exploited herbivores bred for specific purposes, such as land cultivation, sources of power for milling and irrigation, for transportation, and for the production of meat, fibre and milk. Only since the work of Mendel, published in 1865, and the development of the principles of heredity and genetics it has been possible to place animal breeding and selection in an unequivocally scientific context. The more sophisticated genetic engineering opportunities remain to be developed for wide-scale application, although the public opinion on the creation of more “Dolly’s” is divided.

Men’s understanding of the principles of herbivore nutrition and the laboratory techniques to determine them, together with the plant yield and quality production have advanced significantly and nowadays, in intensive production systems, the dietary requirements are calculated with high precision. For high productive cows, like Holstein Friesians with 10,000 litres of milk per lactation, grass is not any more sufficient to fulfil the nutritive requirements for maintenance, lactation and pregnancy, although grass breeding focused the last decades more and more to the improvement of digestibility and intake.

Since World War II, plant breeding, land improvement and the use of fertilizers and pesticides have been used as means of increasing primary production. In countries where pasture production is highly seasonal, countries with either cold winters or hot dry summers, feeding systems using cereals (especially maize cultivation) and protein-rich supplements
(soya), as well as crop by-products (sugar beet pulp, swill, ...) have been developed to meet the nutritional needs of herbivores when there is insufficient grass to graze to meet the animals needs for maintenance, pregnancy and meat and milk production. In countries with plenty of cheap available cereals, pulses and crop by-products, feedlot systems have been developed in which cattle never feel a need to utilize pastoral resources at all. Since the bovine spongiform encephalopathy (BSE) crisis an important protein rich by-product, meat and bone meal, is forbidden for incorporation and use in animal feed. Nowadays EU programs are implemented in the member states to grow protein rich crops on the farm level.

In many other countries of the world however, pastoral rangelands are the primary and only resource on which both wild and domesticated herbivores depend. As the human population has increased, pasture land has been converted into cropland, resulting in an overgrazing of the remaining grasslands. The grassland area decreased in Western Europe with at least 8.5 million ha since the fifties. In the same period other traditional forage crops, like fodder beets and red clover almost disappeared, while the cultivation of the maize came up and nowadays European dairy farms are nowadays mostly based on the cultivation of two crops: grassland and maize (Carlier et al. 2008).

Grassland management differs in many activities: cutting or grazing, rotational grazing or set stocking, organic and/or fertilization, (pre wilted) silage and/or haymaking, renovation techniques, grass or grass/clover seed mixtures, grass stage (leafy or stemmy)/development at grazing/cutting.

Arable farming deals with crop rotation systems, monocultures, reduced/no tillage or ploughing, soil covering (or not) after the harvest, plant protection, (heavy) machinery used for different activities: ploughing, sowing, fertilizing, spraying, harvesting. All these different farming activities and some combinations have on the long term a great impact on the environment and landscape. In the region “Waasland” of Flanders the fields show a characteristic slope, because these were ploughed up always in the same direction.

EUROPEAN COMMON AGRICULTURAL POLICY-CAP

The EU went a long way since it was founded in 1957 by 6 countries. After the 2nd World War food supply was a very important issue. Article 39.1 of the treaty of Rome declares the objectives of the common agricultural policy:

(a) to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilization of the factors of production, in particular labour;

(b) thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture;

(c) to stabilize markets;

(d) to assure the availability of supplies;

(e) to ensure that supplies reach consumers at reasonable prices.

The EU policy was reviewed several times and in the meantime the so called “acquis communautaire” counts more than 100,000 pages, issued in Regulations, Directives and Recommendations. Since the last decennia also the environment became a very important item for the EU policy makers and nowadays it is the objective of the European Community to reach the right balance between competitive agricultural production and the respect of nature and the environment. It implies an active pursuit of coherence between agricultural and environmental policy. The complexity of the relationship between agriculture and the environment – harmful and beneficial processes, diversity of local conditions and production systems – has conditioned the approach to environmental integration in the context of the Common Agricultural Policy - CAP of the European Union. Central to the understanding of
this relationship is the principle of Good Farming Practice - GFP which corresponds to the type of farming that a reasonable farmer would follow in the region concerned. This includes at least compliance with the Community and the national environmental legislation. However, wherever society asks farmers to accomplish environmental objectives beyond the reference level of good farming practices, and the farmer incurs, as a result, a cost or loss of income, then society must pay for the environmental services provided through agro-environmental measures.

In most Member States traditional farming methods were lost and changed to big business: the traditional food became more and more processed and a huge amount of different products is available. The food chain went longer and between “farm to fork” a lot of intermediates came also playing their roles. Less than 5% of the active people of the EU population procure a big part of the food for 500 mio inhabitants. It is normal and justified that the EU Commission and Parliament stress the importance of agriculture and its farmers in their policy.

The Common Agricultural Policy has evolved over time, in the beginning product support (meat, milk, sugar, …) resulting in overproduction, followed by the “quota” system, set aside and finally the “single payment” direct support. This direct support scheme is well explained in Regulation (EC) No 73/2009, repealing Regulation (EC) No1782/2003 and establishes the principle that farmers who do not comply with certain requirements in the areas of public, animal and plant health, environment and animal welfare are subject to reductions of or exclusion from direct support. This ‘cross compliance’ system forms an integral part of Community support under direct payments and should therefore be maintained. For ensuring sustainable agricultural activities, farmers are obliged to respect common rules and standards for preserving the environment and the landscape. The common rules and standards are mandatory and form the very basis for ensuring that agricultural activity is undertaken in a sustainable way. Carlier et al. (2007) describe the situation in Romania and Bulgaria concerning the good agricultural and environmental condition ‘GAEC’. This GAEC was developed to avoid agricultural land being abandoned and to ensure that it is maintained in good condition. Member States have to adopt standards taking account of the specific characteristics of the areas concerned, including soil and climatic conditions and existing farming systems, land use, crop rotation, farming practices and farm structures.

Since Agenda 2000, the Common Agricultural Policy has two pillars: the market and income policy (‘first pillar’), and the sustainable development of rural areas (‘second pillar’). The 2003 CAP reform brings greater quality to environmental integration, with new or amended measures to promote the protection of the farmed environment in both pillars. The Health Check of the CAP reform in 2008 will modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges. Climate change, renewable energy, water management, biodiversity and dairy restructuring are crucial challenges for Europe’s rural areas, agriculture and forestry.

Concerning market and income policy, the cross-compliance is the core instrument. The reform CAP 2003 reform also involves decoupling most direct payments from production. From 2005, all farmers receiving direct payments will be subject to compulsory cross-compliance (Council Regulation No 1782/2003 repealed by Council Regulation 73/2009 and Commission Regulation No 796/2004. In the fields of environment, public, animal and plant health and animal welfare, 19 legislative acts applying directly at the farm level have been established and farmers will be sanctioned in case of non-compliance (partial or entire reduction of direct support). Beneficiaries of direct payments will also be obliged to
keep land in good agricultural and environmental conditions. These conditions will be defined by Member States, and should include standards related to soil protection, maintenance of soil organic matter and soil structure, and maintenance of habitats and landscape, including the protection of permanent pasture. In addition, Member States must also ensure that there is no significant decrease in their total permanent pasture area, if necessary by prohibiting its conversion to arable land.

As regards the rural development policy, compliance with minimum environmental standards, the so called Good Agricultural and Environmental Condition GAEC, is a condition for eligibility for support under several different rural development measures, such as assistance for investments in agricultural holdings setting-up of young farmers and improving the processing and marketing of agricultural products. Moreover, only environmental commitments above the reference level of Good Farming Practice may qualify for agro-environment payments. The support to less-favoured areas also require the respect of the codes of GFP.

The Common Agricultural Policy reflects two principles, the "polluter pays principle" and the "provider gets principle", in integrating environmental concerns into the policy via two mechanisms:

- most CAP payments are linked with the respect of selected statutory requirements (Cross-Compliance) and sanctioning non-compliance by payment reductions.
- paying for the provision of environmental public goods and services going beyond mandatory requirements (Agro-Environment Measures).

Agro-environment measures play a crucial role for meeting society's demand for environmental outcomes provided by agriculture. Environmental objectives often go beyond what can be expected farmers to deliver by respecting compulsory legislation. If farmers are requested to engage voluntarily in action to enhance the environment beyond the mandatory requirements, employ their own private resources and factors of production to deliver environmental public goods and services which are of interest to the wider public and society, we have to provide appropriate incentives. Where farmers are remunerated for voluntarily engaging in environment-related activities, we speak about the "provider-gets-principle". Farmers commit themselves, for a minimum period of at least five years, to adopt environmentally-friendly farming techniques that go beyond legal obligations and in return, farmers receive payments that provide compensation for additional costs and income. Examples of commitments covered by national/regional agro-environmental schemes are:

- environmentally favourable extensification of farming;
- management of low-intensity pasture systems;
- integrated farm management and organic agriculture;
- preservation of landscape and historical features such as hedgerows, ditches and woods;
- conservation of high-value habitats and their associated biodiversity.

Agro-environment measures may be designed at the national, regional, or local level so that they can be adapted to particular farming systems and specific environmental conditions. This makes agro-environment a targeted tool for achieving environmental goals.

The ecological integrity of a landscape is an important element of its attractiveness and perceived value. The fairly recently established concept of High Nature Value (HNV) farming recognises the causality between certain types of farming activity and natural values, such as high levels of biodiversity or the presence of species and habitats of conservation concern. Two major changes have contributed to upsetting the delicate balance between agriculture and biodiversity:
-specialisation and intensification of certain production methods (such as the use of more chemicals and heavy machinery in contrast to organic farming),

-marginalisation or abandonment of traditional land management being a key factor in preserving certain habitats and site-specific biodiversity.

In some EU Member States, land abandonment and the withdrawal of traditional management may become a threat to biodiversity on farmland. In Romania and Bulgaria million ha of land are abandonment. In many new EU Member States the cadastral, establishing an efficient system for securing land titles of real estate owners which can be expanded nationwide is not effective. The responsibility to manage all the agricultural land is therefore not assured. Therefore, preventing these processes is a key action for halting the loss of biodiversity. The Common Agricultural Policy addresses the preservation of habitats and biodiversity by:

-specific Rural Development measures targeted towards the preservation of habitats and biodiversity (agro-environment and Natura 2000 payments) and

-restrictions included in the scope of cross compliance (Birds and Habitats Directives).

The Common Agricultural Policy supports investments to conserve water, improve irrigation infrastructures and enable farmers to improve irrigation techniques. It also helps to protect water quality. Agriculture can impact in different ways on the good chemical and good quantitative status of groundwater and surface waters. Water quality may be negatively affected by the presence of pesticide residues. Still nowadays residues of pesticides used in agriculture (DDT, atrazines, …) can be detected in aquatic environments (Carlier et al. 2007), nutrients from fertilisers, or sediments from soil erosion.

Protecting water quality is a key issue of the Common Agricultural Policy. The central aim is to avoid water pollution through agricultural activity, mainly through a sustainable use of pesticides and fertilisers for avoiding, in particular, nitrate pollution. In agriculture, the trend towards greater intensification and higher productivity during much of the past fifty years was accompanied by a significant increase in the use of both inorganic nitrogen and phosphorous fertilisers. This led to excessive amounts of nitrates and phosphates in waters and to eutrophication of these waters. The cross-compliance framework includes statutory requirements related to water protection and management arising from the implementation of the groundwater directive and nitrates directive, as well as GAEC standards.

The EU’s nitrates directive was introduced in 1991 with two main objectives in mind: to reduce water pollution by nitrates from agricultural sources and to prevent further pollution. The directive is managed by Member States and involves: monitoring of water quality in relation to agriculture; designation of nitrate vulnerable zones (many regions in the EU are declared vulnerable zones: e.g. Flanders, the Netherlands, Denmark,… and the national/regional policy makers have problems to suggest effective measures) establishment of (voluntary) codes of good agricultural practice and of (obligatory) measures to be implemented in action programs for the nitrate vulnerable zones. For these zones, the directive also establishes a maximum limit of nitrogen from livestock manure that can be applied per hectare: 170 kg N/ha per year.

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. Action programmes must include obligatory measures concerning periods of prohibition of the application of certain types of fertiliser, capacity of manure storage vessels, limitations to the application of fertilisers (on steep slopes; to water-saturated, flooded, frozen or snow-covered ground; near water courses),
as well as other measures set out in codes of good agricultural practice.

Implementation of the directive by Member States is a complex process. So far, only a minority of Member States have fully applied the directive and the Commission has opened a number of infringement proceedings against Member States for non-implementation. The linkage between good farming practice and respect of statutory environmental standards (including those relating to the nitrates directive), as established in the framework of the EU’s rural development policy, may contribute to improved implementation by Member States.

Widely used in farming, pesticides or plant protection products protect plants or plant products against pests. They fight crop pests and reduce competition from weeds, thus improving yields and protecting the availability, quality, reliability and price of produce to the benefit of farmers and consumers. However, their use does involve risk because most have inherent properties that can make them dangerous to health and the environment if not used properly. Human and animal health can be negatively affected through direct exposure (e.g. industrial workers producing plant protection products and operators applying them) and indirect exposure (e.g. via their residues in agricultural produce and drinking water, or by exposure of bystanders or animals to spray drift). Soil and water may be polluted via spray drift, dispersal of pesticides into the soil, and run-off during or after cleaning of equipment, or via uncontrolled disposal.

The EU thus seeks to ensure their correct use, it regulates in order to minimize their detrimental environmental impact and informs the public about their use and any residue issues. There are EU regulations covering the placing of plant protection products on the market, the placing of biocide products on the market and fixing maximum residue levels in food. Special attention is given to the “contamination” of GMO substances in “normal” products. In 2003 the EU Commission adopted Recommendation 2003/556/EC on guidelines for the development of national strategies and best practices to ensure the co-existence of genetically modified crops with conventional and organic farming, reaffirming that measures for co-existence should be developed by the Member States. Alexandrova et al. (2004) described this problem in detail.

The EU also regulates to protect water quality in respect of pesticides. The water framework directive provides an integrated framework for assessment, monitoring and management of all surface waters and groundwater based on their ecological and chemical status. Soil and water may be polluted via spray drift, dispersal of pesticides into the soil, and run-off during or after cleaning of equipment, or via uncontrolled disposal. The directive requires measures be taken to reduce or eliminate emissions, discharges and losses of hazardous substances, for the protection of surface waters. Ten years ago 33 priority substances were listed, out of which 13 were substances used in plant protection products.

In terms of quantity, on average, 44 % of total water abstraction in Europe is used for agriculture. Southern European countries use the largest percentages of abstracted water for agriculture. This generally accounts for more than two-thirds of total abstraction. In northern Member States, levels of water use in agriculture are much lower, with irrigation being less important but still accounting for more than 30 % in some areas. Irrigation helps improve crop productivity and reduce risks due to dry periods, making it possible to grow more profitable crops. However, irrigation is also 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.

On the other hand, traditional irrigation systems create diverse and intricate landscapes, which support a variety of wildlife and have important cultural and historic value. The Common Agricultural Policy contributes to the protection of soil from erosion and the
maintenance of soil organic matter and soil structure:
- favouring the build-up of soil organic matter,
- the enhancement of soil biodiversity,
- the reduction of soil erosion, contamination and compaction.

In addition, the provisions of the GAEC (Annex IV of the cross-compliance Regulation), notably with respect to the obligation to keeping agricultural land in good agricultural and environmental condition, can play an important role for soil protection. Processes like desertification, erosion, the decline in organic matter in soil, soil contamination (e.g. by heavy metals), soil compaction and salinity can reduce the ecological state and, thereby, the productive capacity of soil cause soil and lose its capacity to carry out its main functions.. (Carlier et al., 2004, Carlier et al., 2007). Such degradation can result from inappropriate farming practices such as unbalanced fertilisation, the excessive use of groundwater for irrigation, improper use of pesticides, use of heavy machinery, or overgrazing. Other causes of soil degradation include the abandonment of certain farming practices. For example greater specialisation towards arable farming has frequently meant an end of traditional crop rotation systems (e.g. maize cultivation) and fertilising with green legumes (working these plants into the soil), practices that helped restore the organic matter content of soil. (Carlier et al., 2008).

Apart from the principle that farmers should observe a minimum level of environmental standards as a condition for the full granting of the direct payments another basic principle embodied in the Community strategy for the integration of environmental considerations into the CAP is that, wherever the society desires that farmers deliver an environmental service beyond that baseline level, this service should be purchased through agro-environmental measures. In the framework of the rural development policy, the Community offers a menu of measures to promote the protection of the farmed environment and its biodiversity. There are, among others, possibilities of support for less favoured areas and agro-environmental measures, which entail, respectively, applying or going beyond the usual Good Farming Practices.

Two major changes in agriculture have upset its equilibrium with biodiversity. These are the intensification of production, on the one hand, and the under-utilization of land, on the other. The specialization, concentration and intensification of agricultural production that have occurred during the last decades, are widely recognized as potentially threatening biodiversity conservation. Many species have a direct interdependence with agriculture (i.e. many bird species nest and feed on farmland). However, it is difficult to isolate the effects of changes in land use from others such as urbanization and the progression of infrastructure, which also occur in rural areas. The agricultural biodiversity includes all components of biological diversity of relevance for food and agriculture, and all components of biological diversity that constitutes the agro-ecosystem: the variety of animals, plants and micro-organisms, at the level of genetic, species and ecosystem which are necessary to sustain the key functions of the agro-ecosystem, its structure and processes.

However, sound agricultural management practices can have a substantial positive impact on the conservation of the EU's wild flora and fauna, as well as on the socio-economic situation of rural areas. Traditional farming contributes to safeguarding certain existing natural or semi-natural habitats. In some EU Member States, land abandonment (e.g. Bulgaria and Romania) and the withdrawal of traditional management may become a threat to biodiversity on farmland.

Agro-environmental measures offer opportunities for favouring the build-up of soil organic matter, the enhancement of soil biodiversity, the reduction of soil erosion,
contamination and compaction. These measures include support to organic farming, conservation tillage, the protection and maintenance of terraces, safer pesticide use, integrated crop management, management of low-intensity pasture systems, lowering stock density and the use of certified compost.

The afforestation of agricultural land (it means artificial establishment of forest on lands that were not historically forests, in contrast to reforestation), has become an established part of agricultural policy and the CAP provides financial incentives to farmers converting marginal agricultural land to woodland and forest. If correctly managed forestry can have a significant and positive impact on the natural landscape and on biodiversity. Forests also play a role in offsetting the 'greenhouse effect' and the threat of global warming. The CAP also supports forest improvement, protective measures against forest fires and the establishment of wind breaks (important in fighting soil erosion). The principal aims are to maintain the ecological stability of forests and to restore damaged ones.

CONCLUSIONS

When the EU was founded in 1957, food supply was one of the most important issue. In the Treaty of Rome, special attention was given to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture. This is still going on. But since Agenda 2000, the Common Agricultural Policy relies on two pillars: the market and income policy ('first pillar'), and the sustainable development of rural areas ('second pillar'). The 2003 CAP reform brings greater quality to environmental integration, with new or amended measures to promote the protection of the farmed environment in both pillars. The Health Check of the CAP reform in 2008 will modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges. From 1 January 2010, Member States shall provide in their rural development programs, in accordance with their specific needs, the following priorities: climate change, renewable energy, water management, biodiversity and dairy restructuring are crucial challenges for Europe's rural areas, agriculture and forestry.

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