

## **SPEECH**

Thank you for inviting me today to talk about the relationship between environment and agriculture. I am pleased to do it not only because this is a major file under my responsibility as Director of Nature Capital in the Commission's Environment Directorate General, but also because I believe it is important to have the complexity of this relationship in mind when considering the wider question of how agriculture and environmental protection can contribute to growth and employment.

Agriculture, along with forestry, are hugely important for the environment. The reason for this is quite simple: combined, farmers and foresters in Europe manage three quarters of our land use. This means that the way they manage their land is crucial for the health of soils, for protecting water and biodiversity, as well as for achieving climate change objectives. Farming can benefit our environment enormously... if things go wrong, however, the potential for causing problems is just as large.

Agriculture and environment are heavily inter-dependent. First of all, **agriculture needs the environment**: farmers depend on good environmental quality, fertile soil, on the availability of unpolluted water, on pollination and on other aspects of biodiversity such as the natural predators of crop pests. Many farmers also depend on keeping climate change under control so as to avoid large scale desertification or floods. And beyond the direct impacts of environment on agriculture, farmers in many regions can benefit from an environmentally healthy and beautiful landscape by diversifying their income to include tourism on the farm.

**Environment also needs agriculture.** This need is particularly clear in situations where traditional farming systems have evolved along with wildlife species. These so-called 'High Nature Value' farming systems constitute a significant part of the nature areas protected under the **EU Directives on Birds and on Habitats**. In other words, if these farming systems are lost to abandonment, or if production methods are intensified in certain ways, then the precious biodiversity is lost.

However, of course this positive relationship is only part of the picture when it comes to the impact of agriculture on

environment: in contrast to this positive relationship between **extensive farming systems** and biodiversity, is often a less positive relationship between more intensive farming and the environment.

Farmers claim, with some justification, to be guardians of the land and the environment, but it is sobering to reflect on the extent of the changes in farm practice over the past 50 years and their largely unintended negative effects on the environment. For example, the increase of the productivity of the dairy sector has come partly from a system change from traditional production to one mainly based on silage (including maize in many regions) and greater use of concentrates, with a resultant decline of highly ecological grassland. Likewise, the use of increasingly large farm machines, encouraged by the prospects of a higher level of output per farmer worker, has also led to a huge loss of natural farm features, which were the places where wildlife was still often able to find shelter and food, even in the more intensively farmed areas. These are just two examples among countless ones on the way changes in farming systems have led to environmental damage.

It is changes like these which have, almost always unintentionally, resulted in a huge pressure on **biodiversity**. Science tells us we are in the middle of a period of mass extinction triggered by human pressure on species and ecosystems. In 2010, EU heads of state and government took on a commitment to halting biodiversity loss and the degradation of ecosystems in Europe by 2020, and to restore them as far as possible by that date. It is telling to note that, in their assessments of the environmental status of valuable habitats protected under the Habitats Directive, scientists have found that the state of agricultural habitats is particularly poor, with only 7% of these reaching good status. Improving this situation will need a significant contribution by the major land managers, both in and outside protected areas: that means farmers.

Modern farming techniques can also put pressure on **soil quality**, if soil organic matter is not replenished (for example as a result of insufficient crop rotation), or if soil is contaminated (for example with cadmium from fertilisers), or compacted by heavy farm machinery, or lost to erosion. We face across Europe some frightening realities about soil. Half our European soils have low organic matter and well over 10 million hectares

are subject to high and unsustainable levels of erosion. This means that **soil erosion** in many parts of Europe is taking place much faster than soil can be replenished: natural processes allow soil replenishment of between 1-2 cm per year, whereas, much soil erosion in the EU is over 10 cm/year. In other words, unless we are careful, modern farming methods will lead to unsustainable situations which put at risk not only the wider benefits of our ecosystems – such as flood regulation, and carbon storage in soil - but even put at risk basic food production in the longer term.

Intensive farming methods can put pressure on **water quality**, for example by leading to water pollution by nutrients – nitrates and phosphorus – and pesticides. The cost of cleaning up this pollution to supply clean drinking water is massive – dwarfing the costs of prevention. So one has to wonder how frustrated those authorities responsible for providing drinking water must be at the lack of sufficient preventive measures, and what a burden the costs of clean up put on the taxpayer.

**Water use** is also a huge issue of concern in Europe as climate change begins to bite. Within current and future rural

development programmes, the Commission is encouraging much more efficient water use notably through greatly improved irrigation systems. But the pressures on the water resource remain real, and it will be necessary for many Member States and farmers also to reflect on what type of production is really compatible with long term water sustainability. It will undoubtedly be the case that farmers in some regions will have to face the reality that certain types of production are possible, but others are not. One thing is certain – if Member States allow the continued unsustainable use of water, this will end badly, and among the first to be affected will be farmers themselves.

In reaction to these pressures from farming, and indeed from other sectors, a substantial body of environmental legislation relevant to farming has been developed in the European Union over recent years – important examples for farming being the **Nitrates Directive**, the **Water Framework Directive**, the **Pesticides Sustainable Use Directive**.

There are also environmental provisions in the **Common Agricultural Policy**, such as cross compliance, which addresses particularly some soil issues; and there are the new 'greening'

elements agreed in the recently completed CAP reform, which aimed to address in particular biodiversity, as well as being designed to have some positive impacts on soil and water.

But all these provisions need to be well implemented, and where Member States have options to choose from – as they now do in the 'greening' elements of the new Common Agricultural Policy- the environmental impact will depend to a great extent on how courageous Member States are in pursuing their environmental goals.

Similarly, the way Member States choose to implement environmental Directives will be crucial for the impact farming has on the environment. For example, the actual measures Member States have proposed in their River Basin Management Plans in implementing the Water Framework Directive, will have an impact on how much money has to be spent providing incentives to farmers to modify their practices, through instruments such as Rural Development Programmes. Similarly, the choice Member States make in their national management plans under the Pesticides Sustainable Use Directive, as well as the obligations they introduce with respect to integrated

pesticide management, will have a significant impact on how successful these instruments are in improving water quality.

Member States who are still deciding how to implement the latest CAP reform would do well to bear in mind the reality of the simple equation, that the more they do through regulation, the less they have to pay with public money; and that if they fail to make courageous choices in terms of regulating environmentally damaging practices, there will be a high budgetary price to pay, as the only alternative will be to pay farmers not to do this damage. At a time of economic hardship and related budgetary constraints, it would be odd for an administration not to look very closely at where to draw the line between mandatory requirements and incentive payments. I suspect that many Member States, if they examine this question with an open mind, will ask themselves how long they can afford to go on paying for things which are essentially no more than good practice in terms of land management.

Other speakers will no doubt have more to say on what impact this complex relationship between agriculture and environment can have on growth and employment. I would just like to say



two things. The first is that you cannot expect to have growth in anything but the very short term if you don't look after your resources and your environment; unsustainable practices are, by definition, **not sustainable**, and will ultimately undermine growth, by undermining the natural resource base, as well as by bringing additional financial burdens arising from the fact that cleaning up the environment always costs more than prevention.

The second thing I want to say on growth and jobs is that there are real opportunities for jobs providing environmental services on farms – whether it is in maintaining certain traditional farming techniques which support landscape and biodiversity, or in changing practices to make them more favourable for the environment. Traditional farming systems tend to involve a higher level of employment, than more intensive modern ones. This does not need to be an economic problem as long as the market failure is recognised, and society is willing to pay for the environmental services that these farmers are providing. We already have an excellent model of this in the agri-environment measures in Members States' Rural Development Programmes. There are thousands of these measures throughout Europe, and they are contributing in a major way both to preserving and improving the environment, and to paying farmers for what is

often rewarding work, and is certainly valued work. To take Romania as an example – as Romania has a great deal of High Nature Value areas – the agri-environment measures bring not only an opportunity for employment in providing environmental services on farms, but also help to bring a huge indirect opportunity for further employment in tourism: after all, if tourists want to visit rural Romania, it is for the beauty of its landscapes and wildlife – they will not want to visit if it becomes a desolate landscape of monoculture, as some parts of Western and Northern Europe have sadly become.

I would like to end by wishing that this conference brings a new understanding to this interesting and important subject. Agriculture and environment are both extremely complex areas, so it is not surprising if the interface between them is even more complex. But I do believe that we already have sufficient knowledge and intelligence required to make the right decisions. I hope that the political leaders of Europe can find also the courage needed to do so, so that future generations can continue to enjoy healthy food, a beautiful countryside, and a resilient environment.

Thank you for your attention.