Agriculture and Forestry, Partners to preserve Biodiversity
Introduction

The Convention on Biological Diversity (CBD) signed by the European Union at the 1992 Rio Earth Summit defines biological diversity as:

'the variability among living organisms from all sources including, inter alia terrestrial, marine or other aquatic ecosystems and the ecological complexes of which they are part. This includes biodiversity within species, between species and of ecosystems' (art. 2).

And clearly states its global objectives as:

', [...] the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources... ' (art.1).

Preserving biodiversity worldwide is, besides climate change and sustainable water management, one of the main challenges of the 21st Century and of high importance for European farmers and forest producers. Both are users of biological diversity for their economic activities and are dependent on a healthy ecosystem.

The agricultural and forestry sectors are particularly aware of their dependency on healthy ecosystems, giving importance to the maintenance of the positive externalities. The forest sector and the agricultural sector take their role in the preservation of biodiversity seriously and are keen to cooperate with other sectors to achieve the goal of bringing the loss of biodiversity to a halt by 2010. Commitments to improving biodiversity often have significant financial and management impacts on the forestry and farming activities and therefore proper valuation of the benefits produced and adequate compensation is needed to achieve the goal.

Agricultural biodiversity contributes to food security and livelihood security and underpins the development of all food production. It is the first link in the food chain, developed and safeguarded by farmers. On their side the forests are a component of biodiversity; for centuries forests have been a factor for conserving biodiversity. The length of forestry cycles is a decisive condition of biodiversity and the functioning of forest ecosystems.

1 Based on Copa – Cogeca’s position paper on biodiversity (26 May 2008)
The importance of biodiversity for agriculture and forestry

Biodiversity and nature in general underpin the economies of agriculture and forestry. Yet protecting nature and producing renewable materials such as food, wood, or feed are often presented as being contrary to each other. This does not reflect reality as nature provides resources upon which farmers’ and forest producers’ daily life and their economy depend. The ecosystem services provided by nature and especially by biodiversity include the provision of food and non-food as well as protective functions related to air, water, carbon cycle, and climate.

Agriculturally used biodiversity has a huge economic importance due to its market value. Moreover it guarantees employment and income for many European citizens directly involved in the agricultural sector or indirectly through upstream and downstream production. Maximising the beneficial impact of ecosystem services has ever since ensured high production levels for agriculture and thereby provided food for people. Humans have cultivated plants and reared animals for thousands of years through careful selection based on nature’s immense genetic diversity. The diversity of European forests creates the basis for the multiple products and benefits derived from them. Biodiversity within species and between them as well as healthy and well-functioning ecosystems are precondition to sustainable forest management and production. Biodiversity and the variation it produces is also the source for new products, services and innovations which can benefit the diverse and changing need of society.

Only through genetic biodiversity plants and animals are able to adapt to a changing environment and changing climate conditions – an aspect which will become even more relevant in future decades. Therefore the maintenance of biodiversity is necessary for ensuring the stability, sustainability and productivity of agriculture and forestry.

Maintaining and enhancing self-regulating mechanisms, e.g. nutrient cycling, soil rehabilitation and decomposition of organic matter, groundwater recharge or pollination reduces the requirements of external input. Only by building on knowledge of functioning ecosystems, can agriculture and forest management reach their full potential and productivity.

The basic conclusion is clear: Biodiversity is one of the foundations of both a sustainable environment and a sustainable economy in agriculture and forestry.

The importance of agriculture and forestry for biodiversity

European landscapes were and are still shaped by the interaction of agricultural land use, forestry and biodiversity. The European countryside is the main feature of our continent. The EU-27 is dominated by rural areas, representing 91% of the territory and 56% of the population. In this context, bearing in mind that a vast majority of the agricultural and forest areas lays in rural areas, it becomes evident that farmers and forest owners are the major land managers, and therefore play a key role in the sustainable management of natural resources. But agriculture and forestry also support the social and economic activities of rural populations at its whole. Furthermore ecosys-
stems used for agriculture and forestry which are managed in a sustainable way contribute to wider ecosystem functions; they have a mutual relationship.

Many wild plants and animals depend on the existence of agricultural land use and the proximity to forests. Through the respective agricultural use, especially in extensive systems particular ecosystems are preserved and able to evolve. Even though the production of generally one single crop dominates on the field itself, the border-structured neighbouring arable land remains an area of high biodiversity. Many species live in border landscapes between forest and agricultural used land including small streams, fens or swamps. Moreover a number of wild animals beneficial for agriculture such as pollinators need agri-ecosystems to survive, of which some are the result of agricultural activities such as mountainous pastures.

Most open and semi-natural habitats currently depend on agricultural activities and it is the quantity and quality of these habitats which contributes fundamentally to the diversity and composition of species. If, however, the agricultural management of these highly valuable areas changed or if these areas were abandoned, a lot of species could be threatened with extinction and thus biological diversity would be lost.

For crops and domestic animals, diversity within species is at least as important as diversity between species and has been greatly expanded through agriculture. Ecological knowledge of farmers and forest producers and their practices, as well as gene banks and breeders’ materials conserving biodiversity ex situ, are highly important for the preservation of biodiversity.

In Europe, sustainable forest management means “the stewardship and use of forests and forest lands in a way, an at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems” as defined in the Ministerial Conference on the Protection of Forests in Europe (MCPFE). Protection and maintenance of biodiversity are an integral part of sustainable forest management. This is also reflected in national forest programmes and other national forest policy instruments.

Great achievements have been made over the last years in safeguarding threatened species through specific activities such as agri-environmental measures, good practice guidelines, voluntary actions of the forest sector, LIFE projects and specific nature protection schemes (under national financing as well as under EU co-financing).

Practical implications, efforts undertaken and visions for the future

Agriculture on its own is not able to meet the goal of halting biodiversity loss by 2010: Efforts in other sectors are also needed. However, European farmers have already taken many steps in the right direction in recent years.

The Common Agricultural Policy (CAP) plays a key role. European agriculture policy and farmers have greatly reacted to the need for action through the ongoing reform. The decoupling of direct payments from agricultural production is an important step towards conserving biodiversity. The introduction of cross-compliance led to a further improvement in environmental standards. However the efforts done by farmers in recent years takes time to become apparent. Quick wins in biodiversity are ecologically extremely difficult to achieve. Improvement of ecosystems is not a linear process, in most cases there is a period of apparent stability without changes before recovery occurs.

Copa and Cogeca are aware of the importance of ecosystems preservation. Therefore Copa - Cogeca call upon the EU Institutions to allocate the necessary funds in order to enhance the positive environmental impacts of farming and to promote the sustainable use of biological resources. Farmers and their cooperatives are already working hard to improve their
environmental performance, but they need stable framework conditions and adequate financing. Copa and Cogeca stress that the farmers should be supported through financial measures in order to afford the strong efforts needed to maintain the rural ecosystems in the conditions of high level of biodiversity.

The concept of voluntary agreements and payments for ecosystem services has to be further developed for agricultural land as well as for forest. Present-day forest management practices in Europe ensure that nowadays the ecological values of forests are well taken into consideration and that biodiversity will be maintained. Voluntary tools which are based on true valuation of the environmental benefits produced will help to enhance biodiversity.

Copa and Cogeca are of the opinion that voluntary agri-environmental measures that compensate either for the higher cost of production or for lower yields play a central role in maintaining and improving biodiversity. For example marginal and low-lying land can be important for flood defence and should not be underestimated in its immense biological variety. But farmers have to be compensated for any adjustments required. Copa and Cogeca insist on a proper funding mechanism to secure a balance between optimised production and sustainable maintenance of vital ecosystems.

Copa and Cogeca welcome the principle of creating a European-wide NATURA 2000 network for the preservation of valuable eco-systems and for protecting endangered native species. The preservation needs have to be assessed on a scientific basis and the most valuable areas form the ecological point of view should be given priority. NATURA 2000 is especially of relevance for the agricultural and forestry as the majority of the respective territory is made up of farming land and forests. Often the NATURA 2000 sites depend on traditional farming methods that are no longer profitable for the farmers today, therefore sufficient and long term funding must be made available to compensate for income forgone and thus to enable farmers to meet societal demands. Furthermore, Copa and Cogeca stress the importance of constructive dialogue between decision-makers, governmental administration, farmers and forest producers for a successful implementation of the NATURA 2000 network. Member States should provide them with the opportunity to proactively contribute to nature conservation policies and the creation of management plans to combine the interests, but also the local knowledge, of the agricultura, and forestry sector.

As already stressed above, one must be aware of the positive
external effects of sustainable land use. Biodiversity depend on the farmers’ and forest producers’ influence, their practices and their ecological knowledge. Farmers and forest producers are adapting and adjusting their practices through increased rates of technical innovation both in management and machinery as well as in evolving market demands. To ensure that these necessary adaptations occur in an ecologically friendly way, there is a need to support them through training and advisory services. Furthermore efforts in the research field (e.g. through FP 7) are necessary to ensure that farmers gain new ecological knowledge and to help them to integrate this knowledge in their daily activities.

Climate change will have a considerable impact on biodiversity. Therefore even if agriculture performed in an ideal environmentally friendly way biodiversity would still be at risk. In this context Copa and Cogeca recall the importance of ex situ conservation.

Copa and Cogeca are also concerned that climate change and globalisation will considerably accelerate the spreading of invasive alien species\(^2\) with negative effects on biodiversity. In serious cases the introduction, be it voluntary or accidental, of such species can drive indigenous species and ecosystems towards extinction with potentially huge repercussions for our landscape and the food sector. Copa and Cogeca therefore call for specific measures to deal with invasive alien species. So far very few initiatives exist to assess the impact on the farming sector. Research in this field should clearly be expanded.

Agricultural landscapes and biodiversity are also challenged by the urbanisation and conversion of agricultural land - but also the highly biodiverse border structures. As urbanisation proceeds, in the future agricultural landscapes will become even more important as a refuge for wild species and thereby for biodiversity. At the same time there will be increasing pressures for higher yields due to the need to feed a larger world population and due to an increased demand for renewable energies. Copa and Cogeca appeal to everyone to help farmers to channel this process in a positive way for biodiversity without endangering the profitability, competitiveness and sustainability of agriculture and thus the future of the European farmers.

Over the last decade, organic farming has become more common in Europe. It has a role to play in preserving and enhancing biodiversity not only through a different attitude and approach towards managing agricultural eco-systems but also through a reduced use of certain inputs. Copa and Cogeca call upon the EU and all of the Member States to continue to promote organic farming.

Copa and Cogeca welcome the recent development in forestry, in particular the development of different international forest

\(^2\) Invasive alien species are non-indigenous species (e.g. plants or animals) that adversely affect the habitats they invade economically, environmentally or ecologically.

policy processes taking into account the three pillars of sustainable forest management. The area covered by forests and other wooded land has expanded by nearly 3% over the last ten years, so that it makes up some 1.6 million square kilometres of the enlarged EU territory. Forest producers do their utmost to manage their forests successfully in order to produce economical, ecological and social benefits. The yearly increments in growing stock exceed yearly felling by more than one third, thus allowing for a sustainable mobilisation of forest biomass to be used in the breakaway from the heavy dependence on finite fossil fuels. European forests today represent the major supply of biomass and will remain an important source for bio-energy also in the future.

It is important to underline the role of the forests slowing down and mitigating climate change; the activities of forest producers have to be encouraged in this sense and regarding land use planning, the priority has to be granted to the protection of forests.

Growing energy crops as well as the increasing use of agricultural commodities in the production of industrial materials such as polymers, lubricants, surface active agents, solvents and fibres can bring more diversification to agro-production and agro-ecosystems. The same applies to the use of plants in medicine. To benefit from the positive effects of new demands, Copa and Cogeca stress the need to enhance further the research on plant varieties, also on those not yet used for agricultural production and their cultivation.

Copa and Cogeca welcome the fact that the EU, in compliance with the Cartagena Protocol on Biosafety, has put in place legislation to organise the supervision and control of cross-border movements of GMOs in order to help conserve and sustainably use biological diversity, taking into account risks to human health and enabling citizens to make free and informed choices as regards GMOs.

**Concluding remarks**

Copa and Cogeca want to draw attention to the fact that farming is needed for maintaining biological diversity. To ensure that sustainable production and nature conservation go hand in hand, cooperation between the agricultural sector and society in meeting nature conservation targets plays a key role. Copa and Cogeca members take biodiversity loss very seriously and have encouraged a variety of measures at national level to enhance the positive environmental impacts of farming and to promote the sustainable use of biological resources.

Copa and Cogeca are aware of the necessity to integrate biodiversity aspects in all fields of EU policies including agricultural policy, but call for an approach which takes the needs and the concerns of the farmers and forest producers into considera-
tion as their economic activities are directly dependent on the biological resources.

Finally Copa and Cogeca call upon the EU institutions and Member States to create public awareness throughout the European societies for the preservation of biodiversity. The positive externalities of agriculture and forestry contributing towards meeting the goal of halting biodiversity loss by 2010 have to be highlighted. In this context it becomes evident that farmers need to be rewarded for positive contributions towards biodiversity which exceed the existing high standards that farmers have had to meet since the 2003 reform. Agriculture cannot preserve and especially not enhance biodiversity at zero cost. Thus support for farmers (to cover extra costs and income foregone) is necessary wherever adaptations to agricultural practices are necessary for helping to preserve nature and biodiversity in our cultural landscapes.
PRESENTATION OF COPA AND COGECA:
The Voice of European Farmers and Their Cooperatives

Copa (Committee of Professional Agricultural Organisations in the European Union) and Cogeca (General Confederation of Agricultural Cooperatives in the European Union) are the organisations which represent the vast majority of farmers and their cooperatives in the European Union. These organisations represent 15 million people working either full-time or part-time on EU farm holdings and more than 40,000 cooperatives. They have 76 member organisations from the EU Member States. Their aim is to defend the general interests of agriculture.