



## Agroforestry and the EU biodiversity strategy

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The European Union developed a biodiversity strategy based on six main targets (EC 2011a) and some of them can be fulfilled by agroforestry: (1) development of a network of natural habitats, (2) ecosystem services restoration based on the development of a green infrastructure and (3) ensuring sustainability of agriculture and forestry activities but also (6) stepping up the EU's contribution to concerted global action to avert biodiversity loss. The first target of the EU biodiversity aims at protecting species and habitats by the EU nature law and should be carried out by showing better conservation or a secure status for 100 % more habitats and 50 % more species by year 2020. Due to the important role that woody perennials and therefore, agroforestry have to play in the biodiversity promotion around Europe, this monitoring should specifically look at the presence of agroforestry practices in the Europe landscape. A comparison between the map of the HNV farmland presence in Europe (EEA 2012) and the map of the area located to silvopastoralism reveals that most of them are located in the Mediterranean area of Europe, highlighting that most of the HNV farmland are managed following the agroforestry principles. Target 2 of the EU Biodiversity Strategy (EC 2011b) aims at maintaining and restore ecosystems and their ecosystem services by including green infrastructure in spatial planning and restoring at least 15 % of degraded ecosystems by 2020.

Agroforestry as a sustainable land use system could be used as part of the claimed green infrastructure to restore degraded ecosystems. There are good examples of ecosystem services restoration in mine lands with silvoarable practices but also in mountain areas with silvopasture agroforestry practices. Target 2 of the EU biodiversity strategy aims also at contributing to the EU's sustainable growth and help mitigate and adapt to climate change. Both contributions can be delivered by agroforestry that has been recognized by the IPCC and the EU (Decision 529/2013/EU) as one of the most important tools to mitigate and adapt to climate change. Agroforestry is really linked to the connexion between agriculture and forestry in each of the fields itself and among both of them when different land use are integrated as highlight EU biodiversity strategy target 3. By introducing woody perennials in agricultural lands or agricultural activities in forest lands and connecting both types of land use (green corridors connecting forest and agricultural areas) biodiversity is enhanced. This can be done through the use of understory forage in the forest land when forage availability is scarce in the grasslands. The connection through the involvement of livestock between forest and open grasslands has a long tradition and can involve short (transtermitance) or long distances (transhumance) and are linked to biodiversity connection among different habitats usually involving agroforestry. Moreover the existence of scattered trees in arable lands can be an excellent corridor connecting forestland biodiversity of large mammals and birds.

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