

## ERFP Ad hoc action Special characteristics of native and local breeds for landscape management and ecosystem services

The concept of ecosystem services is linked to the dependence of humans on its natural environment. Therefore, the study of such services can not be directed exclusively to the domestic breeds supposed to provide it. The whole components of the ecosystems have to be accounted for and the relationship between wild and domestic species studied to understand the process. It has been proven that the same factors shaping the distribution of wild animals (temperature, humidity, ...) apply to the distribution of domestic ones. Moreover, the abundance of both types of biodiversity runs in parallel. This way local livestock can not be seen as a competitor of wild animals but a kind of indicator of the quality of the environment to harbour diversity. Consequently, the sustainable use of native and local livestock breeds represent a reasonable symbiosis of natural species protection and the conservation of domestic breeds.

To help in the detection of the particular services provided by your breeds, the Millennium Ecosystem Assessment distinguished four groups of ecosystem services: (1) provisioning services referring to products obtained from ecosystems; (2) regulating services referring to benefits obtained from the regulation of ecosystem processes; (3) supporting services which are necessary for the production of all other ecosystem services; and (4) cultural services referring to non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation and aesthetic experiences.

It is important to highlight that belonging to an agroecosystem where an ecosystem service is being provided it is not enough to prove that the breed is the responsible of the service. For example, when cleaning of forests by grazing is the ecosystem service, if the replacement of the breed by a different one does not alter the service it means that that particular population is not essential. The classic claim is that '*local breeds are better adapted to natural conditions*', especially in harsh or poor environments. However, little (if any) sound evidences have been provided.

The global aim of the Ad hoc action is searching for and, if possible, generating this type of proofs. We want to avoid the typical '*it is common knowledge*' or '*as everyone knows*'; we look for objective data and not only 'feelings'. The results could possibly be used as a basis for further (scientific) projects which could provide scientific sound evidences to back the claims of this Ad hoc action.

The activities in this Ad hoc action are organized in four work packages:

Work Package 1: Analysis of data available/literature review on indicators of ecosystems services and native and local breeds.

Work Package 2: Collection of Best Practice Examples.

Work Package 3: Survey among breed societies about specific characteristics and traits of the breeds.

Work Package 4: Creation of final report.