#### **POLICYMIX Case Study Description: Portugal**

The following is a short description of policy and research questions in the Portuguese case study of POLICYMIX. This page will be continually updated as the case study focus is developed. Assessments of economic instruments in their policymix in case studies will take place in 2011-2013.

#### 1. Introduction

Montados or cork oak (Quercus suber) and holm oak (Quercus rotundifolia) forests are some of the most biodiversity rich ecosystems of the western Mediterranean Basin. The montado is a humanshaped habitat/landscape, with a sparse cover of evergreen oaks and a heterogeneous understorey of shrubland, grassland and fallows, forming a diversity of habitats of high conservation value.

Montado is a multifunctional habitat that supports biodiversity at different layers. The conservation value of this ecosystem depends on the maintenance of the shrub-grassland matrix through human management.

The devaluation of the socio-economic set up, responsible for the current changes in this system is based on economic causes that have arisen since the early fifties. African swine fever, followed by lower prices of pork products, the replacement of coal by other energy sources and the rural exodus in search new opportunities, leaving the primary sector devoid of people, are the main causes for this.

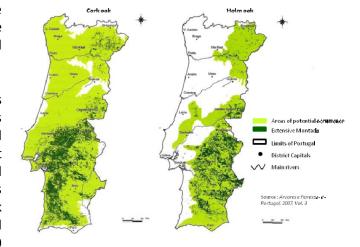
Low economic value of the main products from *montado*, like Iberian pig and cereal, and also inappropriate agricultural practices are leading to mismanagement or abandonment of the system with alongside loss of biodiversity and ecosystem services. Currently, the main economic incentive to human management of cork *montados* has been cork production. On the other hand, conservation of holm oak *montado* depends on a number of human activities, some of which are still in development.

#### 2. National level case study

Forests in Portugal occupy 38% of the territory and are responsible for 165.000 jobs, contributing for 3,2% of the national GDP. About 85% of Portugal's forest is privately owned,

and only 3% belong to the Portuguese Government; the remaining 12% are vacant or owned by local communities.

In Portugal, the *montado* occupies about 34% of the forest area. Cork is the raw material of industrial activity. Portugal accounts for about 70% of the total cork industry global production, a situation that places Portugal as leader in the sector. Cork products represent about 3% of total national exports and around 900 million Euro a year.



Montado has also a significant social function, as all activities related to it are responsible for maintaining population and creating a dynamic economy, helping to develop territories and prevent land abandonment. The management of *montado*, with the use of cork, also generates significant revenues at the local and regional levels in the interior part of the country; it is a socio-economic factor that keeps the balance and employment in rural areas. In the case of holm oak the production of some indigenous species of cattle (sheep and swine) provide quality meat and milk that are the basis of food industry of local and regional importance. Apiculture, the use of resources for hunting and tourism activities related with nature, such as cottages, agro-tourism and eco-tourism, are promising areas of development.

## 2.1. Main economic instruments in use in forest/biodiversity conservation and related regulatory instruments

In Portugal policies regarding forest/biodiversity conservation are mainly based on a regulatory basis, typical command-and-control instruments. The most generic policies are the National Biodiversity Strategy and the Natura 2000 Network Sectoral Plan, which establish the guidelines and orientations for the protection and conservation of several habitats, including the *montados*. The Portuguese legal regime for the conservation of nature and biodiversity, on the application of Decree-Law No. 142/2008, establishes the Elemental Network for Nature Conservation (ENNC) and envisages the establishment of the national register of natural classified values. This network includes the Natura 2000 Network sites and the national network of protected areas, such as natural parks.

Still at the national level, cork and holm oaks are specifically protected by a regulation that forbids the cutting of these trees, except under exceptional conditions, namely for projects of unquestionable public interest.

Portugal has recently (since 2007) implemented ecological fiscal transfers integrated in the annual transfers from the national general budget to the municipalities (Local Finances Law - LFL) in order to compensate them for land-use restrictions imposed by protected areas and Natura 2000 sites.

## 3. Moura-Barrancos case study3.1. Introduction

The case study area is a Natura 2000 site in the southeast of Portugal, which comprises a Site of Community Interest (SCI) and a Birds Special Protection Area (SPA). The area covers parts of four municipalities: Moura, Barrancos, Mourão and Serpa.

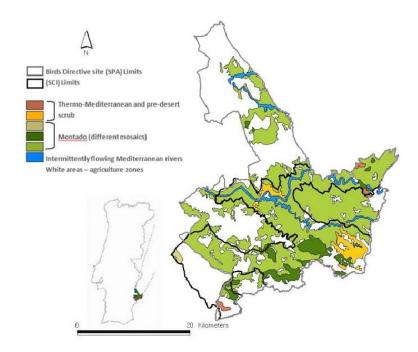
The Moura-Barrancos Site (SCI), under the Habitats Directive has an area of 49.309 ha, overlaping with the other classified area, Mourão-Moura-Barrancos (SPA), that covers 80.608 ha.

The use of traditional agro-pastoral and extensive oak woods on the old shale originates from the existence, in mosaic, of carrasco (habitat 5330 in the Habitats Directive), broom and an important extension of perennial pastures spontaneous under-covered (habitat 6220\* in the Habitats Directive). In wetter areas there are also the cork oak (habitat 6310 in the Habitats Directive) and clumps of oak (Quercus suber) (habitat 9330 in the Habitats Directive).

These agro-forest areas are the habitat of species with a high protection status, such as the Iberian lynx (*Lynx pardinus*), the imperial eagle (*Aquila heliaca*) and the black vulture (*Aegypus* monachus), which are priority species under Habitat and Birds Directive (CEE).

The SCI includes also one Portuguese important shelter for bats, for breeding and roosting periods.

The area presents a high physiographic and geological diversity, with a variety of plant communities. The ancestral human use, linked to agriculture and grazing promotes the diversity of the landscape. The black pig, olive oil and wine are typical products of the region, in an area where human occupancy is low.



# 3.2. Main ecosystem services under evaluation

- CO2 sequestration
- Soil formation and erosion control
- Water cycling
- Nutrient cycling
- Food production (animal and human consumption)
- Cultural services (spiritual, aesthetic, science and education)
- Provision of habitat

### 3.3. Main actors/stakeholders

- Municipalities
- Development associations
- Association of forestry producers
- Hunting associations
- Local tourism businesses
- Governmental institutions
- Landowners

## 3.4. Main economic instruments in use in forest/biodiversity conservation and related regulatory instruments

- Natura 2000 Network Sectoral Plan
- National Nature Conservation and Biodiversity Strategy;
- Regulation of cork and hoalm oaks
- Action Plan for the conservation of Iberian Lynx
- Municipality ecological fiscal transfers Portuguese Local Finances Law.

## 3.5. New instruments under consideration or to be assessed

- Certification schemes (e.g. Forestry Stewardship Council, Forestry Intervention Zones)
- Market-based instruments directly targeted to land-owners, tenants and land managers (e.g. PES)