

The role of private forest in Portugal

Forestis, a private owners federation

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ABSTRACT

Forestis - a non-profit organisation - was created in 1992 and recognised as a public service organisation in 1998. Forestis was established as a result of the previous lack of private forest owners' organisations, the lack of forest management in private forests especially in areas where the properties are small (Northern and Central Portugal) and where the productive potential of the forests is limited.

The main purposes of Forestis are: To promote the creation of local forest owners organisations; to contribute to sustainable management and to represent the interests of the forest owners among the other public and private agents in the Forest Sector.

Nowadays, Forestis is a federation with 27 affiliated organisations. Each of these organisations provides support to private and community forest owners through a variety of services such as technical assistance, elaboration of forest projects, fire surveillance and professional training.

Forestis on its side tries to provide guide lines to the affiliated organisations in order to achieve sustainable management, to increase the owners' income. The owners' financial situation has been discussed several times with the public authorities responsible for forest issues. However, the forest authorities have very limited resources and no tradition for dialogue with the private owners.

Forestis participates actively at the national level providing contributions to forest policies and recommendations based on the experiences from the daily work of their member organisations.

Although the forest owners' interests (commercial and non commercial) are Forestis' main concern, the federation's philosophy is to alert the forest owners and the regional agents of the important role of forests in the landscape. Namely with regard to the prevention of natural risks, such as forest fires; as well as the need to maintain native species and protect the landscape as part of our cultural heritage.

Forestis plays an important role for today's society, particularly in the forest areas Forestis contributes significantly by promoting forest landscape restoration.

Nevertheless there are pertinent questions to answer such as: what is the role of the public and private sectors in the definition of policies for restoring forest landscapes where only 5% of the forest area is publicly owned? Which priorities and policy instruments must be established to give a satisfactory response to the private interests and civil society expectations, represented by the public sector?

1. The Portuguese Natural Forest

Although it is hard to determine the composition of the Portuguese Natural Forest, one could say that *Quercus robur* occupies the Northwest of Portugal, in the Eastern mountainous regions the dominant species was *Quercus pyrenaica*, and the maritime coast of the central region was dominated by *Quercus fagine*. In Southern Portugal, below the natural border, which is defined by the river Tejo, *Quercus suber* was prevalent on the occidental side, whereas the eastern side, from North to South was dominated by *Quercus rotundifolia*, although it is in the Alentejo and Algarve areas that it reaches its higher expression. (J. Carvalho Vasconcelos e J. Amaral Franco 1958)

Independent of the scientifically established classification described above, is the image of the country, covered by the *Quercus* species that prevails in the subconscious of the Portuguese people as the Portuguese Natural Forest. And this is the image that the common Portuguese citizen would like to see recreated.

2. The evolution of the Portuguese Forest in the last century

Throughout the 20th century, successive inventories prepared by the Forest service show that the forest surface has been increasing. However, there is - in terms of suitability and availability of land - space for expansion of the forest area.

In 1902, the forest area could be divided into three main categories according to species composition: the resinous category, highlighting the *Pinus* sp., the *Quercus suber* and *Quercus rotundifolia* category, and in a smaller scale the other *Quercus* sp. and *Castanea* sp category. So at the beginning of the century, the forest already had a different composition from the natural forest described earlier.

At present, the main species are: Pine, *Q. suber*, Eucalyptus, *Quercus rotundifolia*, and more modestly the *P. pinea*, *Castanea* sp. and other Oak species.

The most significant change in the Portuguese forest landscapes was the great increase of the area covered by Eucalyptus between the 1960s and the 1980s, due to the intervention of the pulp industries.

Regarding other species it is relevant to mention the problems which decimated the *Ulmus* sp., and caused a reduction of the areas of the *Castanea* sp., *Fraxinus* sp., *Quercus rotundifolia*, *Q. ruber* and *Q. pyrenaica*. While in the case of *Ulmus* sp. and *Castanea* sp. diseases were the cause of their decline, in the case of *Fraxinus* sp., *Quercus rotundifolia*, *Q. ruber* and *Q. pyrenaica* changes in agro-forestry practices lead to reduced use.

These examples of the expansion or regression of species show that the composition of the forest and consequently of the landscape do not depend solely on natural conditions or management activities, but also on the changes in the production associated with them, as well as economic and social changes.

In relation to the evolution of the area and composition of forests two other relevant aspects should be considered. On one hand, forests are lost due to forest fires, which have not

decreased since the 1970's and on the other hand the forest area has expanded as a consequence of afforestation of agricultural lands.

Presently, the Portuguese Natural Forest covers 3 349 327 ha, which corresponds to 38% of national territory, with great diversity of systems.

However, the potential forest area would comprise 63 %, if wastelands (2 054 571 ha) and unproductive lands (146 534 ha) were included.

3. The forestry ownership

The forestry ownership, in Portugal is eminently private, since approximately 80% of the forest area is owned by 400,000 individual owners, 12% is owned by communities and only 3% is publicly owned. Due to a land acquisition policy, industry is also a significant forest owner. The Portucel Soporcel Group is the largest Portuguese forest owner. It manages 2% of Portugal's land, 4.5% of the country's forests and 20% of the eucalyptus forest. (Portucel Soporcel, www.portucel.pt)

Across Portugal, there are considerable differences in the size of the forest properties and the extent to which they are integrated into properties dominated by agricultural production. In terms of topology, we can divide it into forest explorations, and forest integrated in the agricultural explorations. The forest properties in the North and Centre of Portugal are mainly small and dispersed, whereas in the South they achieve greater dimensions.

Further, the forest owners usually have strong connections to their forest property, while they are very distant in their role as forest managers.

4. Constraints to forest management

4.1 Land Use Planning Instruments

The Portuguese Land Use Planning Systems are based on Regional Land Use Plans that include the Municipal Land use plans. The municipal plans establish restrictions on land use and they define the rules for land use change through two instruments: the National Ecological Reserve (REN) and the National Agricultural Reserve (RAN).

The National Ecological Reserve includes land around waterways, areas with slope higher than 30% and high altitude zones. The National Agricultural Reserve limits the transformation of agricultural land to other uses, including forest.

Parks and Natural Reserves have their own sepecific land use plans, which are defined in their policy of protection and conservation.

4.2 Protected Areas

In addition to land use plans restrictions are also established by Special Protection Area Zones, Protected Areas, Natura 2000 areas, that together correspond to 21,5% of the Portuguese territory.

As a curiosity we can mention that the Natura 2000 area, in Portugal, is the largest in Europe and the percentage of private ownership is also the largest. Considering the high degree of private

ownership as well as the importance of biodiversity and habitat protection in Portugal it is relevant to question whether private forest owners are adequately compensated for the - often significant - restrictions laid down by nature protection instruments

5. The stakeholders of the forestry sector

The main stakeholders are obviously the forest owners, as they own 85% of the forest area. The private forest owners are represented by several different organizations, which defend and promote the private forest areas: local associations and cooperatives, and National federations. There are also hunting and fishing organizations, and industry associations, which are organized according to the raw material they use.

In the public sector, there are three major authorities responsible for the forestry policy, the Ministry for Agriculture and Rural Development (MADRP), through the General Directorate of Forests, the Ministry of Cities, Environment and Land planning (MAOT), and more recently the Internal Affairs Ministry (MAI).

The other parties involved are the local authorities - the municipalities - which have gained competence in Land Planning activities, namely, as they are responsible for the Municipal Land Plans. Unfortunately, these plans have a strong urban bias, partly because the urban construction activities are one of the major sources of funds for the local authorities, through taxing. Further, other stakeholders have recently emerged, including the tourism companies that are interested in establishing facilities in rural areas, due to the interest of urban society in 'green tourism'. Finally, stakeholders also include the environmental organizations, and an organization of forestry contractors.

6. The public and private forest sectors

The three ministries MADRP, MAOT and MAI, share between them, the policies of production, conservation and fire fighting. Although the national forest authority, the General Directorate of Forests, is under control of the Ministry of Agriculture, the execution of any policy is hampered by the lack of institutional dialogue between these two authorities. Each one of them has a partial vision of the forest space. This lack of communication is evident at the local level between technicians within local authorities and ministries, which follow the institutional culture of their own organization, without reflecting on the decisions from the point of view of the territory and the populations.

In terms of forest policy, the State has so far had a hegemonic role, because of the successive planting campaigns which were executed and the creation of the Forestry Regime (1901), with strong intervention in afforestation of mountainous areas, especially using *P. pinaster*, a robust and plastic species.

The Forest Regime authority caused large resistance from the rural population, who had no say in the decisions taken, especially in the community forest areas, where the authority interfered with their activities, namely their pastoral needs. These negative feelings still prevail today.

In the meantime, because of the political changes in Portugal, the weight of the Public sector has been reduced and the State has begun a process of transferring forest management to the private sector, with the exception of part of the community forest areas, which it still manages under the rules of the Forest Regime, which are still in force.

This attempt to transfer management functions to the owners is not easy for two reasons: the rural community emigration (resulting in a higher average age of the population and abandonment of the agricultural and forest activities), and the lack of qualified forest management technicians in the private sector. At this point, there were no private companies of any sort, with the exception of the cellulose industries, and the private forest owners did not have the necessary knowledge to face the new challenges of forest management.

The social transformations between the 60s and the 80s gave rise to a growing distance between landowners and forest, allowing the pulp industries to start a policy of acquisition and renting properties for Eucalyptus planting. This species went from an insignificant position to becoming the third forest species in the 70s. It is also notorious that in the 80s, the country's economy went through a rough period and for some landowners the Eucalyptus plantations allowed them a high and faster source of income (10-12 years), as the prices on the international market were high.

This expansion of the Eucalyptus plantation area gave rise to strong campaigns of protest amongst the civilians through environmental associations, which demonstrated against the landscape changes caused by the expansion of an exotic species, and the consequences these new plantations would have on the ground water reserves.

For the first time, after the popular protests against afforestation of the mountainous areas, there were demonstrations against the use of one species planted across the country. Although many of the interventions at this time had a fundamentalist character, in some cases they were right as the competition between industries gave rise to the establishment of Eucalyptus plantations under inappropriate ecological conditions.

In the 90's an organizational process was initiated by private forest owners leading to the creation of Forest Associations, which began to change the relationship between the public and private sector. For the first time the forest owners had organizations, which could defend their interests and provide them with technical management assistance. In addition, the Public Administration has now identified spokespeople that communicate with private owners.

7. Forestis – Portuguese Forest Association

Besides representing the interests of forest owners, Forestis developed since its start a strong technical component, which aims to support the Association's mission 'Associativism, management and forest defense'. To support this mission, Forestis has created local associations, and is today, a federation with 27 organizations with a sub-regional character.

7.1 Forestis – its forest vision

Forestis has, since its foundation in 1992, defended the concept of a forest for multiple use and complementarity between production and conservation functions.

In this forest model, forest "compartmentalization" occupies an important place as a way to protect the forest against fires and promote biodiversity.

Forestis supports a widening of the scope of activities developed in the forest space, larger rentability of the exploration and higher economic gains for the forest owners.

It is not by chance that we refer to forest space and not forest. We think that there are opportunities and areas for the forest to expand and on the other hand there is also scope for developing activities beyond establishing tree stands.

Forestis also defends the responsibility of the private owners as managers of a natural heritage with great importance to the country, as they own over a third of the territory. In this light, we have since the creation of Forestis, tried to raise the awareness the owners with the aim of providing them with an understanding of the cultural value of the forests and good practice management of the territory.

7.2 Lines of action of Forestis

Forestis' political work aims at resolving some of the structural problems of the Portuguese forest sector, by supporting the creation of attractive conditions for investment in the forests and by defending the legitimate interests of forest owners up and downstream of production. The work of the federation also has a technical dimension through which it tries to create solutions for the forest model and to answer the needs of its 27 organizations, according to their local specific needs.

7.2.1. Political intervention

Forestis considers that the development of the Forest and the rural areas can only be achieved with the active involvement of people who own the rural areas and that any attempt of imposing plans or projects that do not provide basic satisfaction or motivate the people, is obviously doomed to fail.

In Portugal, there are numerous cases of investments at the property and forest level which did not work due to the lack of active participation of owners, who felt completely left out and not responsible. To avoid similar situations, Forestis makes a point of being present at forest policy discussions and contributing with proposals on all aspects of forest management, in order to encourage feasible and successful policies.

As an example, we refer to the Certification of Sustainable Forest Management in which Forestis - since the start - has had an active presence belonging to the Conselho da Fileira Florestal Português (CFFP).

Other points that seem important to resolve include the improvement of the institutional dialogue with public administration. As already mentioned, there are several authorities with responsibility for the forest sector with each their distinct visions and ways of acting.

Further, we have worked to increase the role forests in the decision-making processes at a local level and to promote the interaction between the various stakeholders, who tend to act individually over the same territory, without forest values other than those of interest to themselves.

Also we encourage the creation of financial and tax policies that allow the forest owners to make balanced and sustainable investments. The investment in forestry, in Portugal, is of high risk, due to the high frequency of forest fires. If we add this risk to the low long-term return of capital, it is hard to convince the owners to invest in forest management and use.

In situations where there are limitations that provoke loss of income, there must be an efficient compensation system. We recall that 97% of forest is private and community owned, so nearly all parks, reserves and Natura 2000 areas are privately owned.

Another problem that must be resolved, and for which Forestis has been battling for a solution, especially in the regions characterized by small forest holdings, is the absence of public

registration of properties. In the most scarcely populated areas it is extremely difficult to identify the owners and the boundaries of their properties. The work carried out by the technicians *in situ* is very slow, as they have to tackle the problem of identifying owners before they can initiate the technical work itself.

The forest fires are also a structural problem, which inhibits the forest development and is the main agent for degradation of the landscape.

Because of the uncontrollable level of fires, the majority of funds available are spent on the destruction of the shrub vegetation in an attempt to reduce the risk of fires. Forestis supports that the high amount of financial resources used in fire fighting, should instead be used in preventing these fires, and fire-fighting should be undertaken done by trained professionals, specialized in this type of work.

7.2.2. Technical Interventions

The technical dimension of Forestis' work gives the federation the opportunity to acknowledge on a daily basis the difficulties encountered *in situ* by technicians and owners. In this way the technical activities of Forestis support the defense of the federation's interests in private forestry and to help resolving problems that local organizations would have trouble settling by themselves.

As part of the technical work, Forestis has established two departments: Cartography and Geographical Information System (GIS) and a Professional Training department.

Through the Cartography and GIS department, Forestis has created a Forestry Aptitude Map for the North of the Country, with the aim of identifying suitable forest species for the region.

With time, Forestis has - in partnership with local organizations - elaborated maps of forest occupation and maps of fire risk for different regions, which have been used to define priorities and action proposals at a regional level. These instruments are also very useful to alert politic decision makers to the need of an active collaboration in forestry planning and ordering.

The experience at this level, initiated with the presentation of the Forestry Aptitude Map for the North of Portugal, allows Forestis today to participate in the elaboration of the Forest Land Use Plan (2) for the region of Entre-Douro e Minho. Although these instruments facilitate the work of the technicians and support management of information, decisions must always involve other parameters, which are not as easy to integrate in these systems.

The professional training department develops training for forest owners, and improvements for organizational technicians, according to their individual needs. In relation to Forestis' technicians, it is important to mention the huge input and wide range of skills required for their job. Therefore, Forestis attaches importance to continuous training so that actions undertaken in the forest space respect a model of multifunctional and sustainable forest management.

7.3 Local Forestry Associations' Line of action

Besides the projects regarding reforestation of burnt areas and afforestation of agricultural land, the complementary activities that local organizations are interested in developing include: apiculture, mushroom gathering, chestnut production, aromatic and medicinal herb production and management of hunting activities.

An example of these activities is demonstrated by the forestry section of CAPOLIB (Cooperativa Agrícola de Boticas), which has created a certification scheme for honey from its region. Furthermore, CAPOLIB is in the process on inventorying its regional types of mushrooms and developing a GIS, which will make it possible to better exploit the mushrooms of its region. This project is carried out in partnership with Forestis and UTAD (University of Trás-os-Montes e Alto Douro). The fundamental aim of the organization is to increase multiple use forestry, in order to develop tourism and reduce migration.

With respect to the forest itself, the present challenges include recovering native species, for example chestnut and oak, controlling infests, reforesting burnt areas, reducing the risk of fire by using controlled fires, achieving compatibility between of forest management, pastoral areas and hunting areas as well as afforestation of agricultural wastelands.

Aiming to increase reforestation with *Quercus pyrenaica*, ARBOREA (Associação da Terra Fria Transmontana) is a partner of UTAD, which aims to convince the owners that the wood of *Quercus pyrenaica* can be used for other purposes than firewood. In this project, owners watch the transformation process of this wood until furniture production and receive training in applying the forestry model required to obtain good quality wood.

Regarding Chestnut, Forestis is in partnership with ESAB (Escola Superior de Bragança), developing a demonstration project concerning chestnut forestry in high forest stands and coppice forests. The aim of the project is to show owners two forms of exploration with distinct kinds of wood and investment returns.

8. Conclusion

In the mediterranean region we must reinvent the some of the forest functions in order to maintain the Forest Landscape. Social or economic rural models that do not exist anymore are no longer useful.

Reality shows us that the predominatly rural areas have become insignificant or remote rural areas with fewer people that have less interest in land management.

So the challenge for forest landscape restoration is to draw up a strategy for conservation of our natural patrimony but at the same time increase the human presence in rural areas to bring about the implementation of the strategy.