

Oaklands and forest certification: a Rural Development example

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Abstract: - In the last years, forest certification has become the most important union between the use of forest resources of timber and non-timber sources, with sustainable and responsible exploitation.

The most important global systems in sustainable forest management certification are PEFC and FSC, both promote a type of management that has multiple environmental benefits such as biodiversity conservation or contribution to mitigating climate change, it also provides economic advantages as improve productivity, rationalizes exploitation and making the products more competitive in local and global markets. It contributes also to social benefit, creating jobs, helping to improve well-being and development of rural areas.

This study analyzes the evolution that have taken over the years, both forest certification systems and other aspects related to this topic, in addition to comparing the degree of implementation in Spain, also in the different autonomous communities, and specifically focus on Galicia and we will analyze business sectors most closely relate to forest certification.

The actual society inclinations is to have a higher sensitivity and concern for the environment, in this way forest certification has become a symbol of commitment to the natural environment, so not only forest owners are interested in this topic, also consumers increasingly opt for products that have a stamp of sustainable forest management and the demand for these products is increasing in the market.

For this reason is necessary to analyze different consumer trends, through a survey of a sample of population, that will give us information on topics related with forest certification, preoccupation of the environment and knowledge about consumer trends in the social level, this material forms the second part of the investigation..

Key-Words: - Certification, PEFC, FSC, Rural development, *Quercus petraea*, NW Spain, Timber, Barrel

1 Introduction

Local governments and public institutions around the world realize that sustainability in procurement is a key responsibility and an important element in forward-looking policies and activities. It's an integral part of the role of the public sector to contribute to the aspirations of their constituency and to meet their needs within the limits of our planet.

Aware of the importance of promoting sustainable forest management, national and local governments around the world have made sustainable timber procurement a key requirement of public purchasing. Many have put in place regulatory frameworks and legislation to this effect. Additionally, many have legislation in place to tackle illegal logging and help prevent illegally harvested wood or timber from unsustainable sources entering the market.

Aware of the importance of promoting sustainable forest management, certification has

become an almost indispensable for the timber trade requirement virtually worldwide. Countries on five continents have set up regulatory frameworks in this regard. Moreover, most already have legislation to combat illegal logging and help prevent the entry into their markets of timber harvested outside the law.

Today's society is increasingly sensitized to environmental protection and market demands more products obtained responsibly. Forest certification is therefore the best way to assure the final consumer good management of resources of the mountain, regardless of what it is produced, meaning sustainable forest management "the management and use of forests so and such as maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill now and in the future, relevant ecological, economic and social functions at local, national and global levels,

without causing damage to other ecosystems" (Ministerial Conference Helsinki, 1993).

In the context of rural development, certification is presented as a useful tool to improve management and ensure conservation of forests, as well as to add value and facilitate access to the market for sustainable forest products.

On the other hand, the growing demand for rural, environmental and ecological tourism also means that we must carry out mechanisms of control over it, and forest certification also includes this aspect.

The gradual decline of traditional practices, abandonment of agricultural activity itself and aging rural population, leave the mountain to their fate and subjected to other different uses, leading to new types of forest in places with previously not shown and cause changes to the landscape, fauna and in the present composition in the soil level, unbalancing the own natural balance of each zone.

The mountain and forests of Galicia has always been part of the strategic resources of social organization. The importance that the mountain has in the region is clearly manifested in the fact that almost one in three inhabitants, owns mount or manager, either individually or as a commoner neighbor.

2 *Q. petraea* certification

2.1 *Q. petraea* in the Iberian Peninsula NW

Quercus petraea (Mattuschka) Liebl., is a species with a very concrete distribution area, more reduced than other Fagaceae. Its natural stretching area spans to the most Western European border, specially to the centre and South. It is spread from the Nordic countries to Sicily and from the British Isles to the extinct USSR, reaching Western Asia.

Within the Iberian Peninsula, its distribution appears very disperse, but, however, it is larger than *Quercus robur*'s. Concretely, it is exclusively manifested in the northern area and only in the northern mountain range, from Galicia to Catalonia, being its main manifestations the chains of Leon, Palencia, Santander Basque Country and Navarra (Amaral 1990, Vila-Lameiro 2003).

The species is shortly used for reforestations on the Iberian Peninsula, being frequently found forests formed by pollard trees used to obtain firewood. The abundance of trees from sprout of stool, or even root, justifies their regeneration method as a coppice forest, but without selection of the best coppice

shoots and, therefore, these trees use to have a low commercial value (Díaz-Maroto et al., 2005).

Natural regeneration of oak is increasingly abundant on abandoned agricultural lands, which have very good improvement possibilities by means of an adequate management, as they are formed by young, vigorous and little damaged stems because unfortunate silvicultural treatments were not applied, as they were in another stands (pollard or selective felling of the best specimens). Getting oak stems with good forest habit is difficult and it requires a specific silviculture which has not been applied on the study area. Trees that naturally had these characteristics related to the production of quality timber have been indiscriminately harvested, which has led to an important genetic degradation of these stands (Díaz-Maroto et al., 2005).

However, little frequent operations as cleaning and brush out allow to abandon rapidly the state of "oak scrubland" present in many stands, in which strong competence affects very much to the growth, and being also more sensitive to fires (Vila-Lameiro 2003). The initial density of oak stands must be higher than 10000 stems/ha, which lets improving their shape.

It is necessary to respect the layer of shadeloving species in subsequent operations, which usually exists naturally and favour the formation of good quality oak stems. Thinnings will be moderated, due to the sharp trend of oaks to form sprouts, which are stimulated by lighting of their trunk, and the dominant and codominant trees will be specially managed (Vila-Lameiro, 2003).

In case of scrublands where a previous selection of 400 to 600 sprouts/ha has been done after a clear cut, it is possible to practice coppicing with standards, keeping the accompanying coppice shoots to reduce the appearance of epicormic shoots and the incidence of wind (Díaz-Maroto et al., 2005).

2.2 Certification process: Current status

The different certification systems are accepted by public procurement policies globally as providing evidence for sustainability and legality. Either managed system for forest certification includes common requirements that can be summarized as follows:

- Safeguard ecologically important forest areas
- Protect and enhance biodiversity
- Prohibit forest conversions
- Prohibit most hazardous chemicals
- Prohibit genetically modified trees

- Respect the rights of workers and indigenous peoples
- Encourage local employment
- Comply with fundamental ILO conventions
- Provide consultation with local people and stakeholders
- Respect traditional land rights and local customs

“We are committed to conserving forests and their invaluable biodiversity, and the communities and families that own, work, and live in and around forests”

(William Street, PEFC Chairman)

The European Union Forest Law Enforcement Governance and Trade (FLEGT) Action Plan sets out actions to prevent the import of illegal wood into the EU, to improve the supply of legal timber and to increase demand for wood coming from responsibly managed forests.

A central element of the Action Plan is Voluntary Partnership Agreements (VPAs) with several timber producing countries for the implementation of a licensing system to ensure that no illegal wood enters the EU from participating countries. As of February 2012, VPAs exist between the EU and Cameroon, Central African Republic, Ghana, Indonesia, Liberia, and the Republic of Congo.

A second element is the EU Timber Regulation, which makes it an offence to place illegally harvested timber and timber products on the EU market and requires EU traders to exercise “due diligence”: to minimize the risk that products contain illegally harvested timber.

In the USA, the 100-year old Lacey Act, one of the most important pieces of legislation for US agencies seeking to combat wildlife crime, has been amended to include a ban on trade in illegally-sourced plants (including trees) and their products.

In addition to regulating the US market, the strength of this piece of legislation rests in its acknowledgement and support of other countries’ efforts to govern their own natural resources and in the incentives it creates for companies and others trading in plant and plant products to do the same. This gives it global relevance. Concretely, as part of efforts to address illegal logging and other illegal plant trade, the Lacey Act bans all trade in plant and plant products (such as furniture, paper, or timber) that are illegally sourced from any US state or foreign country. Furthermore, the Act requires importers to declare the country of original harvest and list the names of all plant species contained in

their products, and establishes penalties for violations of the Act, including confiscation of goods and vessels, fines, and even custodial sentences.

Then the management of certified timber means the prevent of all these practices, with the environmental benefits and with the commercial advantages for a public image.

Nowadays, the vast majority of the population have information from the local governments and public institutions that sustainable timber procurement can reduce overall costs; offer significant opportunity to use materials, resources and energy more effectively; and encourage local employment and stimulate markets for innovative new products and services.

Specifically, products derived from sustainable timber procurement policies are accepted that implies the demonstration the legal and regulatory compliance, the performance of cost savings and financial benefits, the local innovation and developing of potential markets, the creation of local green jobs, contributes to global sustainability, and, finally in summary, demonstrates the responsibility to the local constituency, improving public image.

2.3 Certification process steps

The following described process was designed for the realization of the certification in exploitations of affiliated sites with surface minor than 25 ha. This process is available to summit the certification through the Galician Group of Forest Certification and Chain of Custody (CFCCGA), the main important certification institution in Galicia and supported by the Xunta de Galicia.

The certification system managed by the CFCCGA is the Programme for the Endorsement of Forest Certification (PEFC). PEFC is a non-profit, non-governmental organization dedicated to promoting sustainable forest management through independent third-party certification.

In all the membership plots of the System (plots that have received notification expresses with the acceptance and with membership reference code), the harvesting should be carried out taking into account the mentioned below:

- No delivery orders will be issued for certified timber plots whose date of registration in the application for harvest authorization is before the date of been membership of the system

- It’s needed to submit a request for authorization by cadastral reference (a request for each plot) and properly complete all fields of the

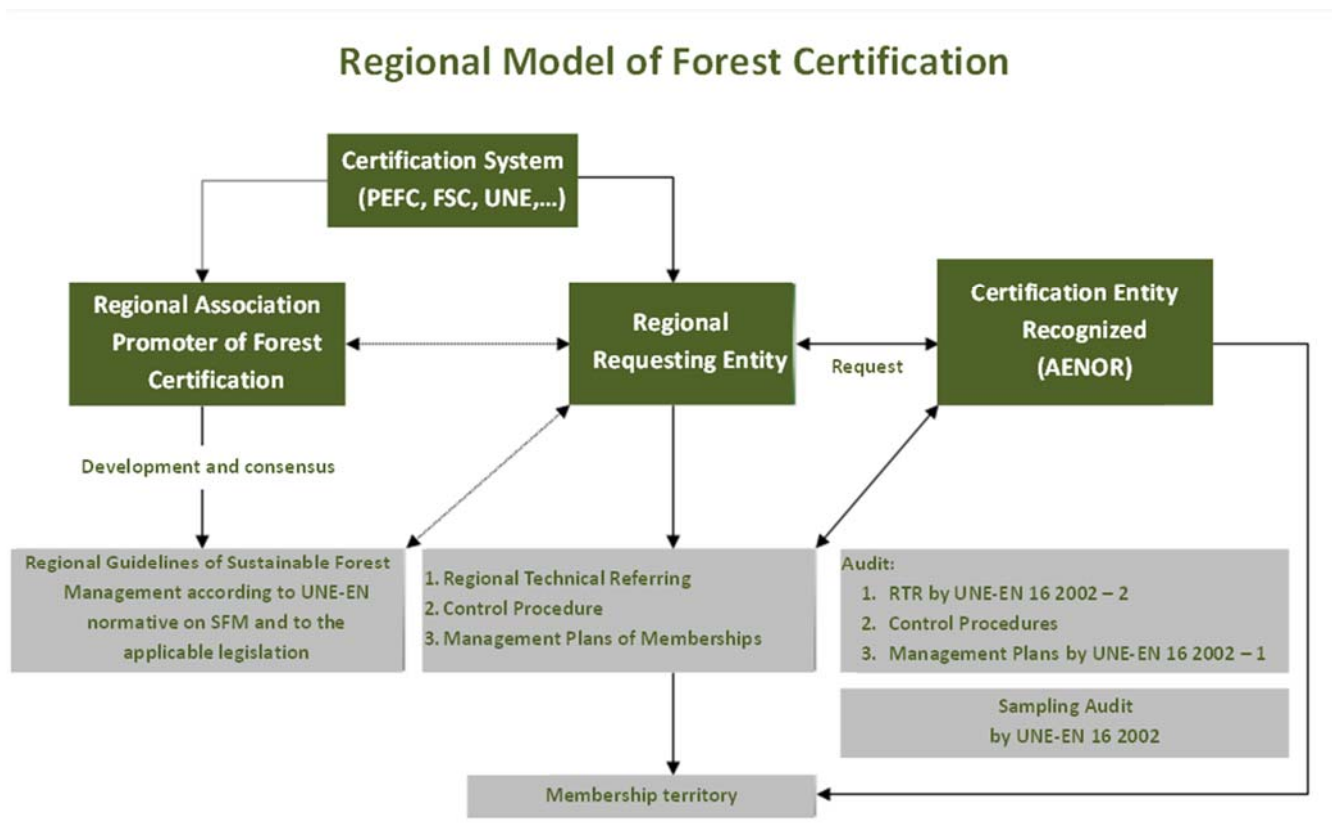


Fig.1. Regional Model of Forest Certification

form. In addition to reflect all relevant observations, it is especially important to note the following data:

- Complete cadastral reference
- Total area of the plot to be harvested (ha), total wooded area in the forest (ha) and total area of the forest (ha)
- Target species exploited
- Number of trees
- Volume of timber to be cut (m³)

- Joined to the authorization of the Forestry Service, the exploitation must have all other legally required permits that would be applicable (water, patrimony, environment, etc..)

- Companies engaged in harvesting plots must comply with the provisions in this regard in the Manual of Good Practice of the Galician Group of Forest Certification and Chain of Custody (CFCCGA). Therefore, they must have sent the form "Commitment Compliance of the Good Practices Manual" signed and sealed by postal mail to CFCCGA before carrying out the first exploitation of a certified plot.

2.4 Certification process in NW Spain: Galicia

In the previous Figure about the forest certification in Galicia, the Regional Requesting Entity, PEFC Galicia, needs a Management Plan for the membership forests. However, as the Group of Forest Certification and Chain of Custody (CFCCGA) has designed a Regional Certification process, this plans are designed by great areas.

In the Figure 3 and the rest of this chapter are described the territorial ambit of application of the joint management plans of the sustainable forest management system of the Group of Forest Certification and Chain of Custody (CFCCGA) in Galicia. As it can be seen, the joint management plans are divided in four different areas: North Cost, Atlantic Cost, Central Plateau and the Rest. Each area is also specified by a very important figure of Forestry Management in Galicia: the District.

2.4.1 Joint Management Plan Central Plateau (PGC-MCD)

Lugo Province

- District X – Terra Chá: Abadín, Begonte, Castro de Rei, Cospeito, Guitiriz, Meira, Muras, A

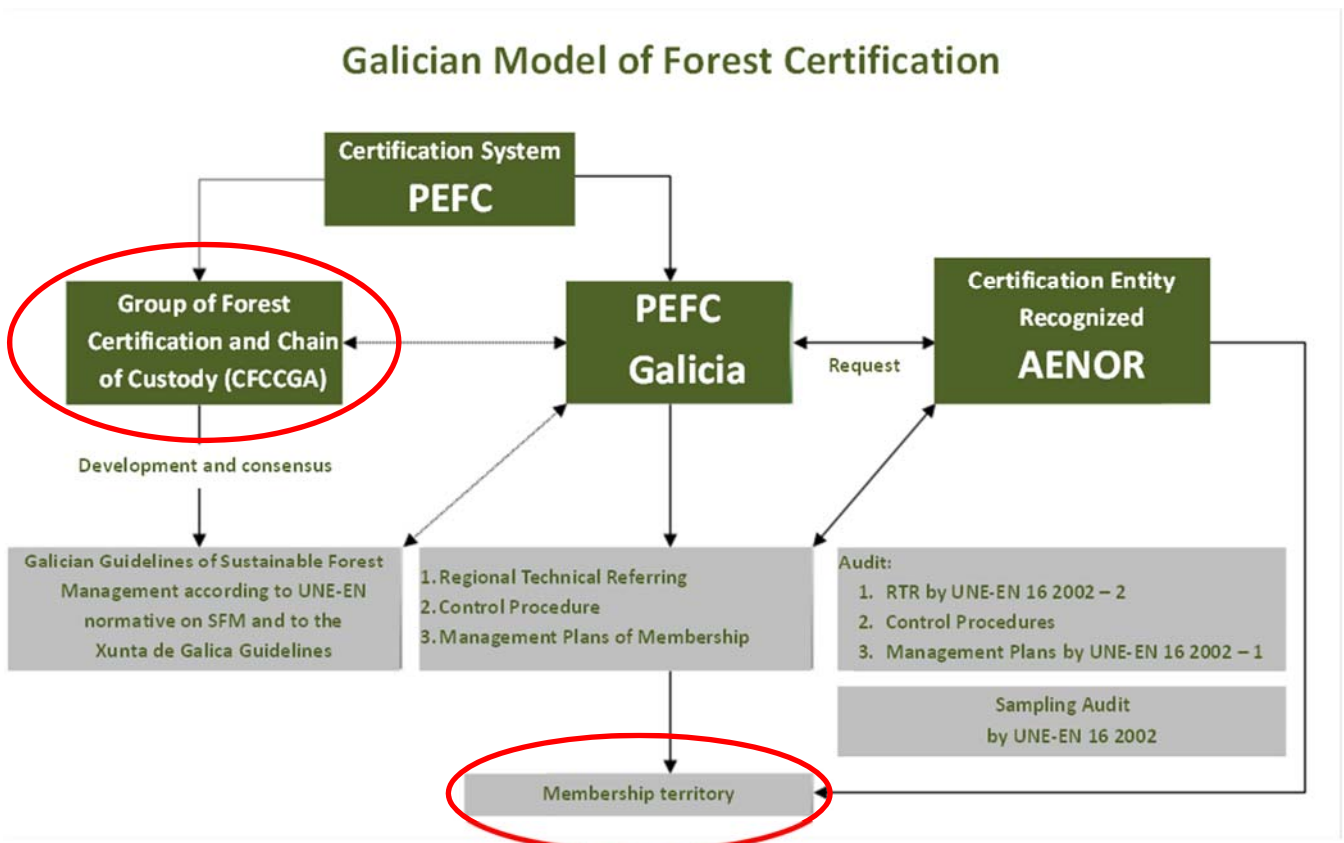


Fig.2. Galician Model of Forest Certification

Pastoriza, Pol, Ribeira de Piquín y Riotorto, Vilalba, Xermade

- District IX – Lugo and Sarria: Antas de Ulla, Castroverde, O Corgo. Friol. Guntín. O Incio.

Láncara, Lugo, Monterroso, Outeiro de Rei, Palas de Rei, Paradela, O Páramo, Portomarín, Rábade, Samos, Sarria, Triacastela

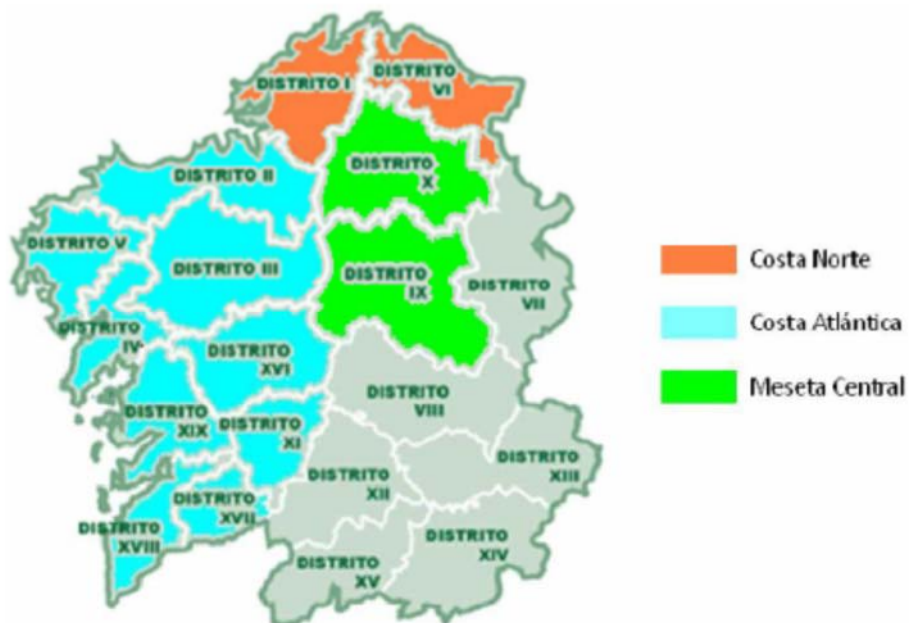


Fig.3. Territorial ambit of application of the joint management plans of Forest Certification

2.4.2 Joint Management Plan North Cost (PGC-CND)

A Coruña Province

- District I – Ferrol: A Capela, Ares, As Pontes de García Rodríguez, As Somozas, Cabanas, Cariño, Cedeira, Cerdido, Fene, Ferrol, Mañón, Moeche, Monfero, Mugardos, Narón, Neda, Ortigueira, Pontedeume, San Sadurniño, Valdoviño

Lugo Province

- District VI – A Mariña Lucense: A Pontenova, Alfoz, Barreiros, Burela, Cervo, Foz, Lourenzá, Mondoñedo, O Valadouro, O Vicedo, Oul, Ribadeo, Trabada, Viveiro, Xove.

2.4.3 Joint Management Plan Atlantic Cost (PGC-CAD)

A Coruña Province

- District II – Bergantiños - Mariñas Coruñesas: A Coruña, Abegondo, Aranga, Arteixo, Bergondo, Betanzos, Cabana de Bergantiños, Cambre, Carballo, Carral, Cesuras, Coirós, Coristanco, Culleredo, Curtis, Irixoa, Laracha, Laxe, Malpica de Bergantiños, Miño, Oleiros, Oza dos Ríos, Sada, Paderne, Ponteceso, Vilarmador, Vilasantar

- District III – Santiago - Meseta Interior: Ames, Arzúa, Boimorto, Boqueixón, Brión, Cerceda, Frades, Melide, Mesía, O Pino, Ordes, Oroso, Santiago de Compostela, Santiso, Sobrado dos Monxes, Teo, Toques, Tordoia, Touro, Trazo, Val do Dubra, Vedra

- District IV – O Barbanza: A Baña, A Pobra do Caramiñal, Boiro, Dodro, Lousame, Negreira, Noia, Outes, Padrón, Porto do Son, Rianxo, Ribeira, Rois

- District V – Fisterra: Camariñas, Carnota, Cee, Corcubión, Dumbria, Fisterra, Mazaricos, Muros, Muxía, Santa Comba, Vimianzo, Zas

Pontevedra Province

- District XVI-Deza – Tabeirós: A Estrada, Agolada, Cerdedo, Dozón, Forcarei, Lalín, Rodeiro, Silleda, Vila de Cruces

- District XVII – O Condado - A Paradanta: A Cañiza, Arbo, As Neves, Covelo, Crecente, Mondariz, Mondariz-Balneario, Pontearreas, Salvaterra de Miño

- District XVIII – Vigo - Baixo Miño: A Guarda, Baiona, Fornelos de Montes, Gondomar, Mos, Nigrán, O Porriño, O Rosal, Oia, Pazos de Borbén, Redondela, Soutomaior, Salceda de Caselas, Tomiño, Tui, Vigo

- District XIX- Caldas – O Salnés: A Illa de Arousa, A Lama, Barro, Bueu, Caldas de Reis, Cambados, Campo Lameiro, Cangas, Catoira, Cotobade, Cuntis, Marín, Meaño, Meis, Moaña, Moraña, O Grove, Poio, Pontecaldelas, Pontecesures, Pontevedra, Portas, Ribadumia, Sanxenxo, Valga, Vilaboa, Vilagarcía de Arousa, Vilanova de Arousa

Ourense Province

- District XI - O Ribeiro – Arenteiro: Arnoia, Avión, Beade, Bearíz, Boborás, Carballeda de Avia, Carballiño, Castrelo de Miño, Cenlle, Cortegada, Leiro, Maside, Melón, O Irixo, Piñor, Punxín, Ribadavia, San Amaro, San Cristovo de Cea

2.5 Forest in NW Spain: Galicia

The information was obtained from several Spanish sources: (1) annual agrarian statistics 2006; (2) data from the second and third National Forest Inventories (NFIs, published for the study area, for 1993/1995 and 2001/2003, respectively) which compile data detailed by species and forest type (ICONA, 1993, 1995; DGCONA, 2001, 2003); (3) Galician agrarian data 2003; (4) Galicia Forest Plan 1992 and Asturias Forest Plan 2001; and (5) other bibliographical sources (e.g. ‘‘Survey on surfaces and efficiency of crops’’, 2007).

The study area is located in the north-west Iberian Peninsula (Figure 4), where the climax vegetation is dominated by deciduous forests including different oak species (Izco, 1987). In Galicia, native broadleaved forests occupy approximately 27% of the total woodland area, i.e. 375,922 ha (DGCONA, 2001).

In Asturias, the data available for *Quercus* indicate that species of this genus occupy 76,871 ha, or 7.25% of the forest land (DGCONA, 2003). It is important to note how these data have changed in the past two decades. In 1986, pure stands of native broadleaves occupied only 20% of the total woodland area in Galicia (ICONA, 1993) (Table I). In Asturias, *Quercus robur* L. and *Q. petraea* (Matts.) Liebl. occupied only 13,961 ha in 1991 (ICONA, 1995), but in 2000, the area occupied had increased to 47,550 ha (DGCONA, 2003; Díaz-Maroto et al., 2006; Guchu et al., 2006).

As a consequence of Spain’s entry into the European Economic Community (EEC) in 1986, there was an inevitable change in the primary sector, which particularly affected the north-west Iberian Peninsula. The first consequence was progression towards a market economy, with its reconstruction of



Fig.4. Study area in the context of the Northwest of the Iberian Peninsula

the Galician agrarian sector. Many agricultural exploitations disappeared and there was a decrease in agricultural land (Perez Yruela, 1995; Bollinger et al., 2007). Between 1962 and 1999, more than 85% of Galician municipalities lost some of their farm land in favour of forestry (Marey, 2003). These data are consistent with the development of several forest areas, covered in the 1950s by autochthonous broadleaved species, which were then converted to crop land until being abandoned, and then by the 1990s were covered in scrub (Marey, 2003).

This trend was aggravated in the 1980s by the policy of providing grants to encourage the abandonment of agricultural activities (Bollinger et al., 2007). The EEC Regulation passed as part of the Common Agricultural Policy (EEC 2080/92) was an attempt to compensate for the decrease in agricultural activities, by promoting different resources, including forests (Crecente et al., 2002). Because of the structure of land ownership in north-west Spain, with the prevalence of a large number of smallholders, these policies did not have a great impact.

Tab.1. Changes in land use between the second and the third National Forest Inventory in Galicia

Land use	Area NFI II (ha)	Area NFI III (ha)	Difference NFI II-III(%)
Agriculture	1,120,295	850,102	24.12
Unproductive	45,707	74,348	62.66
Afforestation	1,060,144	1,386,483	30.78
Deforestation	728,777	643,990	11.63
Total area	2,954,923	2,954,923	--

However, they resulted in an important increase in the number of reforestation projects carried out, as shown by later data from NFIs (ICONA, 1993, 1995; DGCONA, 2001, 2003).

According to Miranda (2002), changes in land use in the study area between the second and third NFI (1993-2001) are highlighted by a clear decrease in agricultural land, which has been replaced by unproductive land and protective forests or forests of fast growing species, especially eucalyptus (Poyatos et al., 2003). These changes involved an increase of almost 250,000 ha in land dedicated to forest only in Galicia, with more than 2.106 ha now covered by forest in the region (Table I). This quantity excludes the almost 75,000 ha of unproductive land, which is double that reported in the second NFI (Table I) (ICONA, 1993; Miranda, 2002; DGCONA, 2001).

The change to unproductive land and forest populated by fast growing species is related to the fact that new forest owners are either traditional farmers or urban dwellers; neither of these groups have any experience in forestry or are interested in managing forest land, and both seek immediate benefits by the use of fast growing species (Crecente et al., 2002).

At the same time as the changes related to forest took place, demands for the conservation and recovery of the natural forests have increased notably. This was reflected by the creation of Nature 2000 Network, Directive 92/43/EEC, indicating the need to include these forests as habitats of community interest. The forests correspond to the following phytosociological associations (Izco,

1987; Rivas- Martínez, 1987; Rivas-Martínez et al., 2001): (1) *Myrtillo-Quercetum roboris* P. Silva, Rozeira & Fontes 1950; (2) *Rusco aculeati-Quercetum roboris* Br.-Bl., P. Silva & Rozeira 1956; (3) *Blechno spicanti-Quercetum roboris* Tx. & Oberdorfer 1958; (4) *Linario triornithophorae-Quercetum petraeae* (Rivas-Martínez, Izco & Costa ex. F. Navarro 1974) F. Prieto & Vázquez 1987; and (5) *Luzulo henriquesii-Quercetum petraeae* (F. Prieto & Vázquez 1987) Díaz & F. Prieto 1994.

Having analysed the historical evolution and the changes in land use of natural broadleaved forests in the Iberian Peninsula, analysis must be made of the future perspectives of these forests and of the implications for policies related to their recovery and conservation. For this the reforestation forecasts included in different Forestry Plans existing in the study area must first be considered. Thus, in 1992 the Galicia Forest Plan predicted that by 2032, productive broadleaved forests, with the exception of eucalyptus, would occupy 410,000 ha. The changes proposed for Galicia were more qualitative than quantitative and only a slight increase in the area covered by broadleaved forests was planned and has almost been reached (DGCONA, 2001). The aim was to develop productive forests of chestnut, oak and other broadleaved species for saw timber and sheet timber.

In fact, these forests received no silvicultural treatment, or inappropriate treatments, such as pollarding and thinning or felling of the best trees, which led to deficient development due to negative genetic selection. The possible alternatives for many of these forests include one or more of the following options (Kenk, 1993; Díaz-Maroto et al., 2005, 2006; Harmer & Morgan, 2007):

- . Maintain coppice forest or coppice with standard forest, with increased felling rotations and/or rationalization of the plan on coppice with standards to halt degradation of the stands. This measure should be accompanied by regulation of the amount of livestock in the areas and excluding livestock after felling (Poyatos et al., 2003).

- . Conversion to high forest. This option would only be applicable in coppice forest or coppice with standard forest of good quality in situations where the wood is not required as firewood or where there is a significant reduction in the forested area.

- . Silvopastoral improvement, accompanied by measures to make the presence of grazing livestock compatible with the presence of forest in stands where the social and economic importance of the farming activities does not allow other alternatives (Rapey et al., 2001).

- . The restoration of more degraded stands through reforestation with other native broadleaved species (Izco, 1987; Díaz-Maroto & Vila-Lameiro, 2007).

2.6 Certification in Galicia and Ireland

The ecological importance of forest certification, first, serves to verify sustainable land management from certain sustainability criteria that ensure everything a particular habitat needs through certification systems is achieved keep track of the state of vegetation cover in relation to factors which may put at risk and prevent possible damage that could weaken it.

Obtain a certificate of this nature also it means that forest, respectful exploitations with the rate of ecosystem regeneration and vitality are made, avoiding felling is carried out also control both hunting activities as fish, making these follow plans managed to maintain populations with the number of suitable individuals directly linking them with the ability to load. species protection plans proposed endangered or threatened, referring to both wildlife and flora, thus helping to maintain the richness and biodiversity.

This motivation coexists with the basic requirements developed for years by Irish Distillers Inc. and its parent company Pernod Ricard. Their social and ecological compromise made possible research collaborations with the University of Santiago de Compostela in recent years, cooperation is expected to continue over time to highlight the value of wood Galician oak in disadvantaged rural areas.

Certification of Mount also contributes to the maintenance and protection of soil directly, because in a mountain well managed, the topsoil is continuous temporarily helps retain wealth in nutrients and minerals that comprise it, creating as it passes time more mature and deep soils. In a second point, the most important against erosion, caused both by weathering, as heavy rain or strong winds, or also minimizing factors as loss of land of high levels to lower by steep slopes because of the protection surface runoff and causes of wear due to anthropological factor.

A forest certificate also helps to maintain the short and long term productive functions of the hill, and whether they are wood or non-wood uses, such as livestock management, both goats, sheep, horses or cattle, doing so this not exert excessive pressure on the environment and in turn, reduce the risk of fire by consuming scrub.

From the social-economic aspect control over the conditions of forest workers, participation of local

communities and all individuals interested in issues of forest planning and management, focusing not only on the owners or managers is taken.

In the context of rural development, certification is presented as a useful tool to improve management and ensure conservation of forests, as well as to add value and facilitate access to the market for sustainable forest products.

On the other hand, the growing demand for rural, environmental and ecological tourism also means that we must carry out mechanisms of control over it, and forest certification also includes this aspect.

Overall certification promotes multiple use of the mountain in a respectful way with the environment and takes into account the optimization of all types resources and services that the forest provides.

The gradual decline of traditional practices, abandonment of agricultural activity itself and aging rural population, leave the mountain to their fate and subjected to other different uses, leading to new types of forest in places with previously not shown and cause changes to the landscape, fauna and in the present composition in the soil level, unbalancing the own natural balance of each zone.

The mountain and forests of Galicia has always been part of the strategic resources of social organization. The importance that the mountain has in the region is clearly manifested in the fact that almost one in three inhabitants, owns mount or manager, either individually or as a commoner neighbor.

Over the past four decades, in which agriculture and forestry past has been ceding ground to industrial development, the mountain has been the impact, in terms of structural changes and management models that are performed today.

In relation to these facts we can assume that today it is basic and essential to have tools for environmental protection and the benefits this brings us directly and indirectly why forest certification has become the most effective mechanism, dynamic and adaptive to accomplish this goal and maintain it in the future.

A social and within the various population groups at present level, is an interesting fact knowledge or ignorance, assessment and involvement of the same in different fields related to forest certification, the natural environment and the importance that is given to him.

There are thousands of advertising messages, information sources and agencies such as NGOs that warn the population, the importance of present and future conservation of different ecosystems, which for a variety of causes such as climate change, deforestation, currently areas at risk of

desertification, extinction of species etc., but the question is that if the message really gets to make a dent in the listener and is conscious of what these problems mean or will mean in the near future.

It is interesting to understand whether society in general have some sort of prior consideration when purchasing products, if interested in the origin and type of production of such products, so in the second part of this project is to be performing a statistical analysis on a sample population to know in detail what level of knowledge about forest certification and the involvement of society in contributing to the improvement and environmental conservation, in addition to their training and awareness of this issue.

2.7 Social study on certification in Galicia: the objective of barrels timber

Forest certification is a direct mechanism to protect forests and monitor your progress may be made responsibly, but this is not enough to bring this goal out, therefore, it is essential to analyze this aspect in society, involvement and this knowledge has on the environment.

Under this overview the main objective of this social study is analyzed by a brief survey (with a population around 1000 people) three key points, framing individuals within a number of variables to determine various trends associated with a population model.

In the first it is to know the relationship between the sample population and recognition with forest certification systems, as well as the distinction of the seals, and know if we take into account when purchasing forest products. This is an essential point to show that social and environmental policy of Irish Distillers is correct and recognized by society

In the second level of analysis will be carried out from the point of view of the consumer of products from forests, what is the importance it attaches to a certified forest product against one who is not and how it takes price variation in these products. It will also consider whether there are certain factors such as the type of product purchased or price, that will make a possible trend at the time of purchase and if so, what are the population groups most take into account these factors.

In a last block the importance that is given to you forest issues relate to development and social welfare will be discussed. The beliefs of the population about the degree of environmental

awareness among different age groups are also displayed, and if the responses between set some kind of dominant inclination.

The respondent also assess whether enough information on environmental issues and sustainable exploitation received by the Administration or other informative means, based on courses, lectures, brochures or media.

All this will be the basis for possible social problems related to sensitivity and awareness now to the natural environment, and with this a set of conclusions in response to the assumptions raised, conclusions will be presented in the relevant section.

3 Certification current status in the study area

As a result of statistical research presented, it is possible to conclude that there are relationships between certain characteristic aspects of an individual and his knowledge of and sensitivity to issues related to the environment and a number of consumer trends, all discussed below.

One of the main objectives sought to estimate the degree of knowledge within society on forest certification and FSC and PEFC seals. The results obtained with respect to the qualification by gender, no significant differences in knowledge of forest certification, although it is noteworthy that in the case of the male, familiarity with the concept is slightly higher. Overall, combining both sexes, it becomes apparent that approximately 60% of the population has no clear meaning this term or completely unknown.

On the other hand, with reference to the seals, the distances in recognition shorten and both the male and the female are almost identical, about 45% of the total, recognizes that we have seen, but ignores its meaning, while 20.5% that has not ever seen and only between 32-37% confirm know what they represent.

Within groups differentiated by age, persons belonging to the range between 19 to 50 years, have more knowledge about certification with the group of people younger and older than 50 years. 53% of youth and 49% of those over fifty have a total lack of knowledge about forest certification, compared to 33% of middle-aged adults.

Note the variation of the same data, from the standpoint of the formation of the individual. Respondents with university studies, exceed more than twice the percentage of recognition of forest certification, reaching 43% of the total, with this one

could say that the level of education is a determining factor in the recognition of certification.

On this issue, obvious that only 49.3% of forest owners know what is certification, not too high percentage, considering that this group are the main stakeholders.

Assessing the relationship that the respondent has with the environment, the results also vary. People who maintain a direct relationship with their profession or studies recognize the terms of certification nearly 62%, compared with 29.8% of people relate solely through natural means by hobby or in your free time. The highest values in their ignorance shown in the group of people who have no interest in the environment, 54% of them.

Given the inclinations in consumption of forest products, it shows that almost 50% of the population never takes into account these seals when purchasing a product, compared with 21.5% who always ignored. In people who recognize sometimes taken into account, depending on the product or the price, the percentages in both cases are similar.

By contrast, most of the population, exceeding 80% of each group, in virtually all cases, would be willing to pay more for a forest product knowing that this has occurred responsibly in all aspects, both economic, environmental and social. The group would be less willing to take a rise in the price would be under 18.

Referring to the willingness to pay more for a certified product, individuals with higher levels of formal education would be most willing to assume the rise in the price and who would assume the worse the rise would be only basic schooling, this is logical because surely varies with the purchasing power of each individual. The consideration of certificates GFS also fluctuates proportionately.

Another objective of the statistical analysis was to know the degree of awareness of the general public regarding environmental issues, environmental management and responsible exploitation of resources. Speaking of general average values, 95% of the sample believed that the forest is a fundamental pillar on issues related to development and welfare, but in contrast to this data, only 3.2% of respondents believe that most the population is involved and acts in favor of the natural environment, while nearly 50% think the implication is insufficient, although it tends to increase because of the consequences that the planet begins to suffer.

Regarding groups more conscious age, the analysis shows that most individuals of all groups, believe that including adults between 25 and 60

years are those that have increased awareness, followed by the group young (under 25) and leaving the last position over 50 years.

Finally, he asked individuals whether environmental information resources and sustainable harvesting, which reaches level of citizenship by the Administration or other agencies is sufficient to keep the properly formed and informed population. Only 31 of the 844 individuals believe that this is so, compared to 770 who think they could improve many aspects at the level of information and social training.

In view of the results, forest certification is emerging as a useful tool for the protection of the natural environment and rural areas. It can be concluded that most people are aware of the need for care of the environment and nature, but on the other hand, the population is not too involved for this to be carried out in an effective way. One of the most crucial to improve this aspect factors is training at all levels of education, according to the data, is currently insufficient to raise awareness and sensitivity and to bring about a change in behavior towards a more respectful society with the environment and referring to responsible consumption habits.

4 Conclusions

As result of the current work it can be said that:

- The knowledge of "Certification" trademark is not enough as it would be desirable
- People with age between 20 and 50 years have the better knowledge
- The study level results essential to relate the implication with certification works
- A important number of owners don't manage the importance of forest certification
- However, more than 20% of consumers take into account the forest certification in their purchases
- This importance for consumers depends on the product price, and near of 80 % would pay MORE!!! for certified products
- Regardless of certification, and in society in general, more than 90 % of people consider that forest is the essential support for development and wellness
- Finally, majority of respondents agree that is needed a higher training and information about forest certification

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