

Certification on the sustainable management of Basque forests¹

Michel, Mario
Basque Government
Department of Agriculture and Fisheries
Donostia-San Sebastián, 1
01010 Vitoria-Gasteiz

BIBLID [1137-8603 (2000), 15; 31-44]

Hiru probintziak osatzen dute Euskadiko Autonomia Elkargoa, 7.233 km²-ko eremua guztira, horren %60 basoek estalirikoa. Zur-sektorearen garapenari begira, etorkizun handia duela esan daiteke. Halaz guztiz, hazkunde azkarreko basoen inpaktu ekologikoaren inguruan sorturiko geroz kontzientziazte sozial handiagoak basoaren funtzio anitzeko erabilera dakar. Horrenbestez, kontsumitzaileari zura ardura ekologikoez eta erantzukin sozialaz administraturiko baso batetik datorrela bermatuko dion egiaztagiria eskatuko dute, ezbairik gabe, etorkizuneko merkatuek. Txosten honek egiaztapen horri buruzko ikuspuntu batzuk azaldu eta zenbait galdera plazaratu nahi ditu euskal basoaren eta Europako merkataritzaren testuinguruan.

Giltz-Hitzak: Basoaren funtzio anitzeko erabilera. Euskal Herria. Ziurtagiria

La Comunidad Autónoma del País Vasco se compone de tres provincias con un área de 7,233 km² en los que el bosque cubre el 61% del terreno. El sector maderero se está desarrollando de forma prometedora. Sin embargo, la creciente concienciación social sobre el impacto ecológico de los bosques de crecimiento rápido está desembocando en un uso multifuncional del bosque. Así, sin duda, los futuros mercados exigirán que una certificación que garantice al consumidor que esa madera se ha originado en un bosque administrado con cuidados ecológicos y responsabilidad social. Este informe proporciona algunos puntos de vista y preguntas sobre la certificación dentro del contexto del bosque vasco y del comercio europeo.

Palabras Clave: Utilización multifuncional del bosque. País Vasco. Certificación.

La Communauté Autonome du Pays Basque se compose de trois provinces avec un territoire de 7,233 km² dont la forêt recouvre 61% du territoire. Le secteur du bois se développe de façon prometteuse. Pourtant, la prise de conscience sociale croissante sur l'impact écologique des forêts à croissance rapide débouche sur un usage multifonctionnel de la forêt. Ainsi, sans aucun doute, les futurs marchés exigeront un certificat pour le consommateur garantissant que ce bois est originaire d'une forêt administrée écologiquement et avec une responsabilité sociale. Ce rapport fournit quelques points de vue et des questions sur la certification dans le contexte de la forêt basque et du commerce européen.

Mots Clés: Utilisation multi-fonctionnelle de la forêt. Pays Basque. Certification.

¹ Chapter 1, 2 and 3 has been extracted from the Basque Country FORWARD report (Michel, M.; Espinel, S.; Arrese, A. 1997)

This paper firstly describes an overview about forestry on Basque Country and the actual feeling about certification on these forests.

1. INTRODUCTION

The Autonomous Community of the Basque Country (ACBC) has 720.000 ha divided into two geographical areas: The Cantabrian area, made up of the coastal provinces of Bizkaia and Gipuzkoa, and northern part of the province of Araba and the Mediterranean area formed by the basin of the Ebro river in Araba. These areas differ in many respects: in climate, landscape, and population, as well as in forest resources and ownership.

The three provinces²: Araba, Bizkaia and Gipuzkoa have their own regional governments, administration and rights. The Basque Government in Vitoria is responsible for the whole of the Basque Community. A total of 2.1 million inhabitants live mainly in the coastal areas and river valleys as well as the Provincial capitals. The industrial tradition dates back to the ironworks of the 16th century. Currently, the service sector represents more than 60% of the economy of the ACBC³, but industry still plays an important role in the economical structure, with a strong iron sector and various steel derivative products.

2. GENERAL FRAMEWORK AND PARTICIPANTS IN THE FOREST SECTOR

2.1 History

Forests were the key factor in the development of the region in the 15th and 16th centuries, when the utilisation of the abundant iron ore together with charcoal allowed the establishment of more than 300 ironworks in the Gipuzkoa and Bizkaia provinces. Shipbuilding was also important. The traditional forestry was based on the decrees and laws regulating the forest management since the Middle Ages with the main aim of preventing the extinction or degradation of forests. Utilisation of timber resources was not intensive, and harvesting was carried out by mainly selective felling.

The 19th century with several wars caused severe problems for the Basque forests. In order to cope with increasing debts, the Public Administration dictated successive Disentailment Laws in 1837 and in 1855. The private owners acquired forest properties for economic profit, and massive felling started. Although in this century the ironworks disappeared, and along with them, high wood consumption, population increase caused even more deforestation partly by firewood consumption. Two fungal attacks during the early 20th century decimated the few stands of oak and chestnut that still remained (oak *oidium* and chestnut "tint"). All in all, the situation of the forests at the beginning of the century was worrying, with practically all hillsides deforested. The best forested areas were those where the share of public holding in land areas was preserved, safe from disentanglements, whereas the rest were distributed into small private holdings, converted into pastures with little productivity and vulnerable to hydrological disasters.

Because of the untenable situation in both the Bizkaia and Gipuzkoa Provinces, two Forest Services were created mainly for reforestation. The reforestation plan was carried out in 1898 by establishing forest nurseries and using a selection of species in the plantations. Sin-

² Basque Country is divided in three regions called provinces: Araba, Bizkaia and Gipuzkoa.

³ Autonomous Community of the Basque Country

ce most of the territory belonged to many private owners with small proprietaries, reforestation was not extensive. In the 1940s massive reforestation began by using *Pinus radiata* D.Don as the main species on both public and private lands. This pine originating from California gained popularity because of its rapid growth. The rural population moving out from farms decreased the labour force in agriculture. This released arable land and uncultivated grasslands allowed the plantation of pines, which produced profitable crops over a short rotation (30-35 years). In 1957 frosts destroyed a large area of the young radiata pine plantations in Gipuzkoa, and reforestation was diversified with other species, such as black pine (*Pinus nigra* Arnold ssp. *laricio*), Japan Larch (*Larix kaempferi* Carrière) and Douglas fir (*Pseudotsuga menziesii* Frank). The radiata pine plantations were restricted to elevations below 600-700 m.

2.2 Legislative framework and forest policy

Because of its autonomous status, the three province governments of the ACBC have exclusive control over forests and forest management. The prevailing legislation in the sector is characterised by its diversity. The legislation in forestry matters can originate from the European Community, from the State as an environmental basic legislation, from the Basque Parliament and Government, from the Provinces mainly, and finally, from the Town Councils.

The State has a basic administrative structure via some organisations operating in cooperation with the Basque Administration and Province Forest Services in nature conservation and protected areas, promotion of reforestation, plant health and with the Department of Forest Research in the National Institute of Agricultural Research, INIA. At the Basque Government the forestry matters are under the Department of Agriculture (Offices of Agriculture and Rural Development, Ordination, Research and Natural Environment, and Food Production Industries).

The Province Councils have control of: forest management, Forestry Services, tracks and pastures, forest rangers, conservation and improvement of the agricultural and forest lands; development and performance of norms in plant health, reform and development, information services, promotion and land training, and plant production (except seeds and nursery plants); management of protected natural spaces, and; defence against fires.

Forest management is carried out either by the forest owners themselves, local organisations or by consortiums established between private owners and the Forest Administration. The latter manage the forest in exchange for a certain percentage of the forest crop.

Forestry operations are subsidised by the Provinces or Regional Government. Funds are available for: forest improvement and conservation (activities under a management plan receive higher subsidies), construction and maintenance of forest tracks and construction of reservoirs, as well as acquisition of new forest machinery. Excluded are: hardwood forest land reforestation with fast-growing species, reforestation of land suitable for agriculture, reforestation endangering conservation of soil and its hydrologic regime, or causing a negative impact on scenery or environment.

2.3 Organisations and participants in the forest sector

Forests are classified by ownership as follows: the forests of the Basque Autonomous Community and Provincial Territories, the forests of the Town Councils and the private fo-

rests. Industry owns very few forestlands with a total of app. 9,000 ha in the three Provinces. The geographical areas divide the region into different forest ownership structures. In the Cantabrian area private, and usually also very fragmented ownership predominates. The most extensive tree-covered lands are publicly owned. In the Ebro basin area, public land ownership is dominant as Local Organisations own the most important areas. Forest ownership is reflected in the share of different species: only 25% of softwood forest land area is publicly owned (14% of radiata pine and 80% of *Pinus sylvestris* forests), whereas 60% of hardwood forests are public (with the exception of *Eucalyptus* species where the share is only 14%). Private forests are mainly commercial, in a ratio of 20:1 in the Cantabrian area and 3:1 in the Ebro area.

Since each of the Provinces makes its own decisions on forestry matters, each Province has its own Forest Owners' Association. These, in turn, are part of the Forest Owners' Confederation responsible for the Basque Country and external relationships. The Associations have a pyramidal organisation with several representative levels. Persons chosen every four years in all counties represent Forest owners. The Associations, through their technicians provide their members with quality plants for reforestation, they promote silvicultural operations, measure stands, market timber, provide continual training by means of conferences, demonstrations, and courses, give technical assistance in applying for subsidies, promotion of joint use of forest roads, and logging agreements with forestry industries.

Different participants in the forest sector have their own interest groups: contractors, saw-miller (SOGESA), furniture manufacturers, etc. The Timber Inter-sectorial Association is a meeting point for the participants in the roundwood sector: forest owners, contractors, sawmills and pulpwood and peeling companies. It was established in 1992 by the request of the sector, and it is aiming at better utilisation of resources in roundwood production and primary processing of the raw material. The sub-sectors represented by their associations meet monthly with the Forest Administration as an onlooker. The Association gathers different viewpoints and problems perceived in the sector, provides framework for an integrated operation of the sector, smoothes out fluctuations in timber prices, surveys needs of and potentials in the sector, carries out studies on the forestry sector, and all in all, is a link between the sector, the Administration and society as a whole.

3. UTILISATION OF FOREST RESOURCES

3.1 Timber resources and wood processing

3.1.1 TIMBER RESOURCES

The forest land area in the Basque Country amounts to app. 444,000 ha (i.e. 61% of the total land area) and the forest coverage is app. 360,000 ha. The forest land area has increased ever since 1972, and hardwood forests have gained an increasing share of the area.

3.1.2 WOOD PRODUCTION

The 360,000 ha of forests existing in the Basque Country represent a growing stock of app. 41.6 million m³, with an annual increment of 2.5 million m³. Softwoods are the basis for timber resources occupying 57% of the forestland, and representing 67% of growing

stock and 74% of annual increment. Radiata pine, together with beech and eucalyptus represented 98% of the total volume of roundwood harvested in the region in 1994. In the area of the Ebro basin, the hardwood forests and mixed forests dominate over the softwoods in a proportion of 3:1, while in the Cantabrian area the situation is the opposite. There are 81 nurseries specialising in forest plant production in the Basque Country. They occupy 40 ha as forest production nurseries and 350 ha for Christmas tree, and give employment to the equivalent of 85 man-years - many of them are family enterprises and second occupations.

In 1996 app. 2.1. Mill. m³ of roundwood was produced in the ACBC. There were two significant peaks in the amounts harvested (with app. 2.4 mill. m³ roundwood annually) during the past decade: one in 1989-90 as a consequence of the fires that destroyed 20,000 ha of mature forest, and another in 1994 and 1995 as a consequence of the clear felling of the massive reforestation areas dating back to the late 1950s. This kind of raw material flow is not sustainable in the long run.

Clear-cut of Radiata pine represents 90% of the total roundwood production, and thus, creates a total dependence on this material in the timber sector. In the future, the dependence will gradually decrease, since the stands of *Pinus nigra*, *Larix* and other species introduced after the frosts of 1957, will reach their maturity and supply a more diversified product. Approximately 80% of clearfellings are carried out in private forests and only 20% in public forests.

In 1996, about 53% of the roundwood went to the sawmilling sector, mechanical and chemical pulp both used app. 25%, and the board industry 7% of local roundwood production. About 15% of the timber is exported from the region without any further processing. This is notably large proportion, and the situation is unfavourable for the sawmilling sector, since practically all exported timber is of the largest dimensions, and is on the increase.

3.1.3 LOGGING AND HAULING

Timber trade in the region is very fragmented, because of the small size of the forest properties as well as small size of the timber companies and contractors. Contractors value the forest, fixing the price of the standing wood. Normally, each contractor, sawmill or papermill has their own measurer. The Forest Owners' Association has already their own measurers. In order to improve the transparency of the process, the Measurers' Official Register was established in 1996.

Contractors are the link between forest owner and companies using timber. They are in charge of buying timber and selling it to the sawmills. There are about 30 contractors in the Basque Country. Some of them can be considered as professional ones working in a continuous manner based on pre-agreements and prices negotiated for a medium term (annual contracts) with a small number of companies. Others, however, work by agreements relating to the overall situation with no fixed customers, and selling the timber to the highest bidder and a part of the timber goes also to the neighbouring provinces of Soria and Burgos. Nowadays, about 50% of the total timber felled in the region pass through the contractors. The other 50% is bought directly by the sawmills, in order to avoid stock pile-up. Some of the sawmills prefer not to depend on contractors for their timber supply. Some of the sawmills are forest owners and they use their own felling teams depending on the supply of roundwood.

All timber harvested in the Basque Country is transported by truck. Although there is a dense railroad network, the short distance between skid points and wood processing industries and costs of loading and delivery operations make it more profitable to use trucks in transportation. The average distance between the point of harvesting and wood processing or timber yard has been estimated at 45 km. There are no specialised transport companies in the timber sector in the ACBC, since the contractors or the wood processing industries have their own transport fleet.

3.1.4 ROUNDWOOD PRICES

The unsteadiness of roundwood prices⁴ is one of the weaknesses of the forest sector. The prices between 1988 and 1996 shows clearly this, in constant US\$ based in 1988, the average price was 41 US\$/m³. The peaks were in 1991 at 46 US\$/m³ and in 1997 at 48 US\$/m³. The minimums were in 1988 at 38 US\$/m³ and 1993 at 33 US\$/m³.

3.1.5 WOOD INDUSTRY

In the ACBC, there are over 2,000 wood industries: sawmills, primary processing, furniture manufacturers, and pulp, paper, and cardboard industries. Together these firms employ almost 14,000 workers.

The Basque papermill industry produces app. 25-30% of all paper and cardboard production in Spain - in 1994 the production in the ACBC was 956,000 tons, and in the rest of Spain 3,500,000 tons. The sawmilling sector in the Basque Country is going through a structural change. The sector has a large number of small companies coexisting with larger ones, usually also concentrating on value-added production and further processing. However, none of the sawmills in the region has large production volumes, and none of them reaches annual production of 100,000 m³.

Radiata pine timber has established its markets. Nowadays about 20% of production of the primary processing companies are further processed into other products. The rest of the output is sold in the form of plank basically in Spain, and especially to the markets in the south-easter part of the country. The most important products of secondary processing are battenboards for furniture manufacturing, do-it-yourself, and packing applications, including europalets and laminated beams for the manufacture of door and window frames that have a very strong export demand. Sub-products and residuals from the sawmills are sold to the pulp industries.

3.1.6 EMPLOYMENT AND INCOME FROM TIMBER RESOURCES

Jobs created by the forest sector and its related industries may seem negligible in the total regional economy of the Basque Country. However, their importance in local economies and at local level may be significant. Even though, it seems that the wood production has reached its limits in the Basque Country, the wood processing and forest industries still have potential for expansion and development.

⁴ price of roundwood in standing trees.

Table 1. Forestry sector in the ACBC. - Total activity of the forestry sector in 1995.

Sub-sectors	Nº. of firms/enterprises	Nº. of employees	Yield value (US\$)
Forest owners	20,000	770	40,675
Logging industries	35	618	61,747
Forest industry	935	8,361	
<i>Sawmills</i>	81	1,073	104,922
<i>First processing</i>	814	3,540	210,740
<i>Pulp, paper and cardboard</i>	40	3,748	121,065
<i>Second transformation</i>			
<i>Furniture</i>	1,082	5,603	290,968
Total sector	2,052	15,352	

Source: SOGESA 1995

3.2 Non-wood goods and services

In the mountain ranges forestland above 1,000 m is used for pasturing livestock, predominantly sheep, horses, and sometimes, cattle. The biggest problem of these mountain pasture areas is erosion by excessive grazing. In addition, some free ranging goats cause, locally, severe damage to reforestation, and the situation, is a permanent source of conflict.

The forest systems are important for hunting and fishing, which both have a long tradition in the rural areas in the region. There has been a slow decrease in the number of hunting and fishing licences - in 1995 there were app. 54,500 hunters compared with the 83,000 in 1982 and 33,000 fishing licences compared with 63,000 in 1977. Actually, the share of land per hunter is one of the lowest in Europe: 10.6 ha/hunter. Because of this, hunters travel to other Spanish provinces. Fishing has suffered problems caused by pollution and damming of rivers but now it is possible to fish in the upper parts.

In spite of the urban character of the Basque society, the natural environment is perceived as an integral part of the culture, and the forest systems, especially near the largely populated centres in the coastal area has an important recreational function. According to a study carried out by the Basque Government, about 25% of the population in wintertime and 35% in summertime are involved in outdoor recreation during weekends. It is clear that during the 1990s, the social demand for recreational use of forests has increased notably. Mountaineering and sight-seeing have long traditions in the region, but nowadays the visitors have new needs, for example, for picnic areas, etc. Because of increased pressure on forests, and the objective of preserving unique natural environments, the activities in the sensitive areas are regulated.

The Protected Natural Spaces Network covers natural environments in the ACBC with unique geomorphological characteristics, or with well-maintained ecosystems. The Network consists of six declared Natural Parks with another four still being planned, and the Urdaibai Biosphere Reserve. At present, it embraces 76,022 ha, i.e. 10% of the total land area, and if the remaining four areas are designated, the protected areas will total 108,400 ha, represen-

ting 15% of the total land area. Activities in these areas are regulated by a specific legislation, and the planning schemes and management are adjusted to the particularities of each case. These areas are attracting more and more visitors, and recreation in these areas is becoming more important. In the Valderejo Natural Park (3,418 ha in Araba) there were over 80,000 visitors in 1996 - a notable increase compared from the app. 52,000 visitors in 1993.

Several physical environment factors (orographic, climatic, geomorphic, etc.) define zones of high natural risk. These range in the Basque Country from erosion and loss of soil to land slides and floods. Forest stands are important in maintaining and protecting soil and regulating the hydrological cycle. In the public forests, the demarkation of these zones is based on the Declaration of Forest of Public Utility, and in the private forests on the Declaration of Protection Forest.

4. SUSTAINABLE MANAGEMENT OF BASQUE FORESTS

Sustainable forestry means meeting present needs without compromising the future. To re-forest, manage and harvest trees with the conservation of soil, water and wildlife. This means constantly growing and harvesting trees and effectively protecting the natural resources.

The Basque Country forest history has been similar to those of many countries in the past; the urban society did not take into account the enormous importance of conservation and ecological values that the forests contain. However, in the rural areas forest preservation has been maintained for centuries.

Actually, the ACBC is able to preserve its natural forest while meeting its own needs for forest products, mainly radiata timber. In fact, less than 50% of the forest surface, mainly planted forest, produces 95% of the wood.

In real terms the Basque forest are effectively separated into two classes, the radiata forest (mainly productive) and the natural forest (mainly conservative). Both have similar ecological functions, drainage management, and land stabilisation but with different main roles for each. At the social level, plantations have helped to establish a general acceptance that commercial use of planted forest is a way of conserving the natural forest.

The current regime of Basque forests can be described as multiple-use system with ecological, social, recreational and productive functions. These functions have been described and regulated in the Basque Forest Plan (1994-2030) approved with the unanimity of the Basque Parliament. This Plan and the present legislative rules guarantee the sustainability of the Basque forest.

On 31 march 1998 the Basque Government approved the following resolution about sustainability of Basque Forest:

“The Basque Government declare that the forest management achieved by public and private owners on the Basque Forest, comply with the sustainable management criteria defined on Helsinki Resolution H1...”

This resolution is based on the subsequent facts:

1. Recent Forest Inventory shows that mature Basque Forests during the last 20 years have maintained their extent with some small increment. An ecological index shows that the biodiversity of the forest has considerably increased in both public and private forests. This proves that current management guarantees permanent forest.

2. The recent Province Forest Regulations (Normas Forales de Montes) promote sustainable management systems to forest owners. They are under the obligation to preserve flora and fauna, to present a management plan for reforestation, including an environmental impact declaration, and they are limited in their management capacity on areas with special vulnerability, Natural Parks or areas under environmental restrictive rules.
3. Clear felling is only permitted in productive areas with fast growing species not in natural forests. In any case the forest owner must obtain authorisation from the forest authorities that can determine the felling system or logging process.

This resolution has been well received in the Basque society, and of course in the forest sector that was waiting for an institutional declaration that would give an official support to its managerial activities. The Press and TV channels have been interested in forest management systems in the Basque forest, and some of them gave their audience complete information about sustainable forest management.

Of course this is the beginning of this interesting process, this resolution is not a safe-conduct given to the forest sector to permit any kind of management in the forest. Because of social interest from the Basque society about forestry and the effects of the increasing complexity of multipurpose goals on rural areas and forest activity, this resolution is the basis for future regulations and decisions like the sustainable certification of the wood produced in our forest.

5. PROPOSAL FOR A CERTIFICATION SCHEME OF PRODUCTS HARVESTED FROM THE SUSTAINABLE FOREST

Today, in the Basque Region, certification is a controversial subject. Firstly because the willingness of the wood market to pay for the cost of certification is not clear. Secondly because certification is a complex process that needs research on the technical, social, ecological and economic aspects. We have many questions but very few answers. In the European context each country is trying to implement the certification process. At the moment many reports are being written, and in most of them the conclusion is that nobody can say many things about this subject, but everybody is doing something. It seems that is not easy to develop viable and credible criteria and mechanisms.

In the ACBC an official forest certification-working group has not been formed yet, but some work was initiated last year with a number of meetings between representatives of different professional associations and the forest administration. Proposals from different organisations or countries like Finland, Belgium, WWF-ADENA, France have been analysed. The discrepancies between some of the conclusions obtained in different studies are evident.

There are four initiatives in forest certification. The first is promoted by Forest Stewardship Council (FSC) founded by WWF, Friends of the Earth, Greenpeace, etc. and based in Oaxaca, Mexico. The second initiative was carried out by ISO, International Standardisation Organisation, which applied the system ISO-14001 to the forest process and certification. Third are the National Systems of Certification that at this moment are being defined in many Regions and Countries, the fourth has been developed by Pulp & Paper Companies, SFI (Sustainable Forest Initiative) with implementation guidelines to company members and their own certificates.

The Basque Forest Sector's opinion is that a national certification system that includes the special features of the Basque forest must be developed. Our Region is one of the highest growth rate forest areas in Europe. With only a 1,4% of the forest area of Spain, it produces

15% of the total wood. However, it has very complete forest standards, forest planning and subsidies system that guarantee the sustainable management of rural and forest areas.

Analysing the ten principles proposed by the FSC, it seems to be excessively generalised, but, perhaps, their local application will lead to a Basque Regional System that could be adopted by local forest owners. It is certain that an agreement is possible about how the Basque forest must be managed. Also, in a parallel way, it is also possible to define a process of continual improvement as proposed by ISO-14001. Seemingly this is not the central issue in the Basque sustainable certification because the technical agreement about ecocertifying system is possible.

The question is *WHO* is going to do it, and if this effort will promote the *MARKETING* of Basque forest products.

The aim of certification is to improve the forest sector by using the market as a positive discrimination against wood produced in countries (especially tropical ones) with high deforestation rates or bad control of forest operations.

Who is going to certify it? It is clear that the forest owners or forest companies cannot certify their management themselves, but they must participate in a Basque Forest Certification Group formed by the different interested members, that could establish the criteria for the certification process. Another possibility is that the Basque Forest Sector signs an agreement with FSC or another international organisation to expand their principles in the Basque circumstances.

We think that in the future both things will be possible, but not under present circumstances.

First, it is necessary to think about it and build guidelines for our forestry practices, to define the principles for sustainable forestry in the Basque Country. In the rural areas of the Basque Country there is a real *Forest culture* that has been developed for many centuries. Some of the forest associations, called "Parzoneras" have been managing forests for more than 500 years. These forests are maintained sustainable with strict rules written 200 to 300 years ago. Knowledge about forestry is transmitted from parents to descendants and they do most of the forest processes. Under these circumstances it is not acceptable that an external organisation, like FSC in Mexico, tell people how they must manage their forest for it to be considered sustainable. It can only work in regions without forest culture or bad or non-existing forest legislation. They must assume the initiatives for sustainable forestry.

Who is going to certify has not been decided yet, but it must be a regional and independent agent whom foresters feel belong to the forest culture. We can find indications that the Basque forest is becoming more healthy and whole under current rules and management techniques, but we must find the way to have recognised by other parts of the world that Basque foresters are managing their forests sustainably. For this we need an independent verification agent.

There is an entity called "Naturtzaingia" that in Basque language means -who take care of wildlife- that watch over the sustainable management in Natural Parks, including 50.000 ha of forest, and perhaps could extend its functions to the remaining forest.

The Second question is if marketing of Basque sustainable forest products will increase the demand and if the market will pay the extra costs of the process. There is a perception that certification may result in competitive advantage to companies in the future. Companies are interested in forest certification for several reasons: new market niches, products more environ-

mentally friendly to the general public, environmental philosophy and so on. However, wood producers are not so positive because wood prices stabilise, and when the certification system becomes accepted, they will have to pay the certification cost. At this moment certification is not a competitive advantage, yet not being certified may be a competitive disadvantage in the future.

At European level, the market for certified products is small and has seen successes and failures. This will primarily be manifested in the formation of buyer's groups, most of them promoted by WWF in U.K., Netherlands, Germany, Denmark, Japan, North America, etc. but there is little evidence about the demand for certified products in the Basque market. Only some companies that export products to Germany have been asked for some kind of certification.

The Basque companies and forest-owners don't want to be involved in this process until a certification system becomes universally accepted for two reasons; an irregular certification system and little evidences of market demand.

In our opinion this situation doesn't mean that the Basque Forest Sector must be impassive about this worldwide discussion. A lot of work must be done to stabilise the principles of an independent third-party certification process, estimating costs of certification and developing a system to minimise costs to small owners and finally assuring that products in the market came from a certified forest (chain of custody compliance). Also a buying group for Basque Radiata Pine with retailers, traders, distributors, wholesalers etc. could be organised to evaluate the future demand for certified wood products and to determine how to document and evaluate their supply sources.

As an advance to future work on certification of the Basque forest, the following three items are as follows:

5.1 Difficulties in setting up certification of Basque forest

- Great number of small forest owners (20.000) and small average sized forest holdings (>6 ha). The extra-cost of certification will be excessive in relation with the value of the timber produced.
- Most of the timber after primary transformation goes to other regions or countries for its end-use, such as furniture, pallets, etc. It will be difficult to control the complete process and to charge customers the corresponding certification costs.
- Seedling stand treatment is not possible with radiata pine. After clear-cut (30-35 years) the land must be replanted.
- Difficulties on training forest workers, e.g. training in biodiversity and occupational safety, by small size of contractors.
- Some extra investment must be made in forest road networks.

5.2 Principles of agreement about sustainable forest certification in the Basque Region

- Third-party certification is the most credible from the consumer's point of view.
- The future for certification is difficult to predict but some producers see little advantages in it.

- The certification cost must be minimised as much as possible.
- Companies that ignore current changes could suffer competitive disadvantages in Europe, and forest certification might be used to develop competitive advantages.
- The destruction of the habitats of species listed for protection is prohibited.
- The preservation of cultural historical monuments, forests, singular trees etc. is safe guarded.
- The target is the production of good quality timber, while paying attention to any environmental impact.
- The use of chemical control measures will be reduced by biological control methods.

5.3 Possible members of the forest certification working group

1. Environmental interest

- Association for Nature Studies
- Birdlife Groups
- WWF-ADENA

2. Economic interest

- Forest Owners Associations
- Timber Intersectorial Association
- Sawmills Association
- Forest Services
- Unions of Agricultural Producers

3. Social interests

- Basque University
- Mountaineer associations
- Town and city council association
- Hunters and Fishers organisations
- Consumers associations

6. OPPORTUNITIES AND PROBLEMS FOR THE CERTIFICATION OF BASQUE FORESTS. GOALS ON THE CERTIFICATION HORIZON

6.1 Opportunities

The forest sector must improve the utilisation of forest resources, concentrating on the production capacity and increasing regional value added by promoting ecologically, socially and culturally sustainable forest management. Basque Forest Owners must be able to demonstrate

to the consumers that their forests are sustainably managed and constitute an adequate habitat for wildlife.

A group on Forest Certification Standards must be formed that also are involved in Basque Forest Culture to study how to apply a certification scheme. Representatives from foresters, conservation groups, universities, consumers and forest administration must form this group. One option is to use *Naturzaintza* to do it. Of course this certification procedure is voluntary and some forest owners may refuse it. There has to be a strict chain of custody compliance to be possible to trace back the timber certified to the forest of origin. Documenting each source of supply will be very difficult but necessary. The cost seems too expensive for small forest owners so process costs must be cheap, because though now new market niches can pay for it, is possible that in the future this will not continue.

Another possibility is to create a viable group with present secondary processing industries that could be interested in certifying radiata pine wood, and to find new niches for that timber in the certified wood markets.

Finally, a promising development for sustainable forest management is to be found in the multiple use of those forests. It is difficult to quantify the economical value of this use. Some estimates give it importance as a possibility for the generation of work opportunities linked to the increasing social awareness of forest uses and the demand for goods and services with environmental credibility.

6.2 Problems

Fragmentation of forest ownership has an effect on forest management and control of the operations, and further, none on the wood supply. The certification will be very complicated and expensive.

The dependency of the Basque forest on global changes in the timber market requires it to ensure the future of wood supplies, and to be sensitive to new customers demands and changes in the industry of forest products through incremental increases in certified products. High quality and certified wood material (especially for the furniture industries) could reach high price levels in the future. The industry is committed to that goal and the forest owners must support it.

To summarise, sustainable management forestry that began in Rio as a conservative philosophy against enormous deforestation in tropical forests, today is mainly an environmental timber marketing strategy applied to temperate forest in developed countries. But this is a positive fact, perceived by companies as a way to take care of their customers and by some foresters as a very interesting challenge to the XXI century. The Basque Country is working on it.

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