

**GUIDELINES FOR THE IMPLEMENTATION OF SOCIAL AND CULTURAL VALUES IN
SUSTAINABLE FOREST MANAGEMENT
(MCPFE - Vienna Resolution 3)**

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1. INTRODUCTION

During the fourth Ministerial Conference on the Protection of Forests (MCPFE) held in Vienna in 2003, a decisive step towards the inclusion of social and cultural values in SFM was taken leading to the adoption of the Vienna Resolution 3. Aiming to further promote and raise awareness of the social and cultural dimensions of sustainable forest management as an important asset to the education, recreation, environment, rural development and economy of society, and taking into account the decisions of UNFF, CBD and the work done by UNESCO, the signatory States committed themselves to “Preserving and enhancing the social and cultural dimension of sustainable forest management in Europe”. After the Vienna Conference scientific work on this matter was carried out by specific scientific meetings promoted by MCFPE together with several national and international institutions.

An international seminar on “Forestry and our cultural heritage” was held in Sunne (Sweden) June, in 2005, attended by participants from 13 countries. The seminar was organized as joint effort of Sweden, the Joint FAO/ECE/ILO Expert Network and the MCPFE Liaison Unit Warsaw. In this event 18 scientific papers were presented addressing issues of cultural heritage and values related to forests and forestry. In addition a list of recommendations at Pan-European and National-regional level were produced and included in the seminar report. The seminar outcome was presented at the MCPFE Expert Level Meeting (October, 2005) and promoted further actions towards implementation of V3. The proceedings were published by the MCPFE LUW in co-operation with Sweden and the FAO/ECE/ILO Expert Network The following year a meeting on “Cultural heritage and sustainable forest management: the role of traditional knowledge” was held in Florence, Italy (11-15 June 2006). The meeting was organized by the IUFRO’s Research Unit 6.07.00 “Forest and Woodland History” and the Task Force on Traditional Forest Knowledge. It was supported by the University of Florence, the U.S. Forest Service and the Liaison Unit of the MCPFE, in cooperation with the Italian Ministry of Agriculture, Food and Forest Policies, the Regional Government of Tuscany, UNESCO, and the European Society for Environmental History. The Conference attracted 120 participants from 24 countries, including forest scientists, forest managers and planners, forest policy experts, and representatives from a variety of international organizations and forest policy bodies, including representatives from the UNFF, FAO, UNCCD, UNESCO, the Council of Europe’s European Landscape Convention, and the MCPFE Liaison Unit. There were two volumes of proceedings,

containing 88 scientific papers, published by the MCPFE in cooperation with IUFRO, as a contribution to the implementation of the MCPFE Work Programme towards Vienna Resolution 3. In addition, a special issue of the scientific journal “Forest Ecology and Management” that included a selection of papers from the Conference was published (in September 2007), dedicated to “Cultural Heritage and Sustainable Forest Management: the role of traditional knowledge”.

The Florence Conference stressed that cultural values related to forests and forestry are often based on long historical experience and deep insights into the dynamics of forest ecosystems. Therefore, they are enthused by the behaviour and characteristics of animal and plant species of special economic, social, cultural, and spiritual significance for local populations. The management and conservation of cultural heritage related to forestry and forested landscapes, not only protects biodiversity that has been created by and is subject to human activity, but may also favours economic growth of such rural areas by promoting local products, encouraging tourism development and eventually contributing towards higher quality of life for local populations.

Many world’s “primary forests” and biodiversity “hotspots” are located in regions with the highest diversity of indigenous populations who manage their natural resources based on their distinctive cultures and their associated traditional knowledge and wisdom. In other rural environments a long history of integration of forestry and agricultural activities has also created land use forms and biological diversity that is closely connected to complex landscape patterns. Cultural landscapes often show a high level of habitat diversity tighten into a versatile mosaic produced by the application of different management forms, and the introduction of a great variety of species over the years, that came to meet specific economic, social and environmental functions.

Considering the future scenarios presented by environmental change and especially by global warming, the conservation of traditional woodlands and forest management practices, as well as their associated landscape-level adaptations to difficult environmental conditions, should be given priority attention. The efficacy in coping with challenging environmental conditions depends on the interactions between key factors that require careful consideration in order to understand their historical success. Many have been achieved through internal experience and logic that has rarely been formalized into formal science. In traditional rural communities, the different types of forest land, from scattered trees in the fields, to dense forest cover, provide a variety of products and environmental services. Marginal and apparently non-productive lands, such as areas with low tree cover or shrublands have been

traditionally exploited providing valuable resources to local populations helping to reduce external energy inputs. Such landscapes are rapidly shrinking in Europe by lack of protection mechanisms and appropriate management.

For all these reasons a focus on cultural landscapes are suggested by these guidelines as an effective approach for the implementation of cultural values in SFM and forest policies, at Pan-European, National, and Regional levels. The fact that cultural values currently play a limited role in SFM indicates the scant consideration given to the role of culture and history in the overall valuation of forests within the paradigm of sustainability developed in recent decades. Failure to effectively and coherently address culture and history may very well be an emerging weakness that needs be reconciled. This is both to give the public and local communities confidence in the protocols designed to recognize well-managed forests, and in moving towards the goals of sustainable management.

After the Florence conference the MCPFE Liaison Unit (Warsaw) requested the International Union of Forest Research Organizations to consider taking part in coordination of international efforts aiming at the elaboration of scientific guidelines for implementation by countries of Vienna Resolution 3. Following consultation with the Research Group 6.07.00 “Forest and Woodland History” and the Task Force “Traditional Forest Knowledge” the proposal was accepted by Dr. Peter Mayer, on behalf of IUFRO, on the occasion of the MCPFE Expert Level Meeting held on 9-10 October 2006 in Warsaw, Poland. This decision was also welcomed by the participants of the Expert Level Meeting. The mandate of coordinating the preparation of the guidelines was given to Prof. Mauro Agnoletti, coordinator of IUFRO 6.07.00, with an official letter on November 6th 2006. The letter stated that the task would build on the activities of the Research Group 6.07.00 and the Task Force on Traditional Forest Knowledge, in particular the conference “Cultural Heritage and Sustainable Forest Management: the Role of Traditional Knowledge”, suggesting also the need to consider additional pan-European indicators for SFM on social and cultural aspects.

2. OBJECTIVES

This report proposes guidelines that are composed by strategies and actions that should be implemented primarily by National Forest Programmes and Rural Development Plans. Strategies are essential to ensure integration and continuity of cultural values in policy making and planning for sustainable forest management (SFM), while specific actions should be specified for the appropriate application of these values in diverse environments. In general strategies and actions are guided by the principle that

incorporation of cultural values in forest management is essential as these can help to improve diversification and therefore competitiveness of often marginal rural economies, improve the ecological status and appearance of the countryside, and eventually contribute towards higher quality of life for local communities. In addition, the effects of the incorporation of such values in forest management are reflected into national and global levels by conserving cultural heritage and maintaining the diversity of cultural landscapes for current and future generations. These guidelines seek to achieve three main objectives:

a. Management and Conservation: actions for sustainable forest management, to identify, include, and maintain the significance of cultural values in national forest programmes and rural development plans as well as to ensure their preservation and protection for the future.

b. Planning: planning activities at the management level to ensure the incorporation of cultural values in forestry and rural development , harmonising, and guiding transformations in socioeconomic development.

c. Valorisation: activities aimed at obtaining the maximum benefits from the sustainable management of forests and, as part of this conceptual framework, the implementation of cultural values, at economical, environmental, and social levels.

3. STRATEGIES AND ACTIONS¹

In order for the main objectives of these guidelines to be achieved, strategies for the inclusion of cultural values in SFM should be defined at National levels. These should define a series of actions that will be taken by Governments and their partners to make the incorporation of cultural values in SFM a fundamental consideration across the forest sector.

3.1 Strategies in National Forest Programmes (NFP)

Each government should commit to a detailed plan that will facilitate the recognition, definition and implementation of cultural values in National Forest Programmes. These strategies should be tailored in the circumstances of each individual country. In general they should:

¹ In brackets the references to the respective commitments of Vienna Resolution 3 are indicated

- 1 - Set up the rules for the definition of cultural values of forests and their associated management practices across the country (V3, para 5);
- 2 - Recognition of cultural values of forests as essential elements of the diversity and richness of national cultural heritage, promoting activities for conservation and valorisation of the forest heritage (V3, para 5, para 10).
- 3 - Implementation of policies aimed at the protection and valorisation of cultural values related to environmental assets (V3, para 7, para 9).
- 4 - Identify the requirements and provide the legislation for the incorporation of cultural values into local plans for forest and woodland management (V3, para 5, para 10);
- 5 - Set up procedures for the participation of different stakeholders (forest owners, public, local and regional authorities etc.) to the implementation of policies on cultural values in forest ecosystems (V3, para 5).
- 6 - Inclusion of cultural values in forest planning and management (V3, para 5)
7. Promote cultural values by including them in educational programmes and development of training courses on protection and management of cultural values in forestry (V3, para 6)
- 8 - Promotion of research on forest history and forest related cultural values (V3, para 11)
- 9 - Provide a conduit for the transmission of information to and from the national, regional and local levels (V3, para 6);
- 10 - Provide mechanisms for revision of relevant policies for the dynamic incorporation of cultural values and the maximization of their benefits (e.g. rural development plans) (V3, para 5).

3.1.1 Actions in National Forest Programmes (NFP)

A series of actions should be incorporated in National Forest programmes in order to promote the general strategies and guidelines mentioned above. These are:

1. Identify cultural values in the territory defining their significance, integrity, and vulnerability (V3, para 5).
2. Manage the process of data collections and collation (V3, para 10)
3. Monitor the process of transformation (V3, para 5)
4. Manage such processes (V3, para 5)
5. Ensure research development in order to increase knowledge and gather evidence so that to limit actual and potential negative impacts on cultural heritage (V3, para 8-11)
6. Define criteria and indicators for their management (V3, para 5)
7. Define planning tools and management techniques (V3, para 5, para 9)

3.1.2 Guidelines for planning and management related to nfp's (V3, para 5)

1. Forest management planning should incorporate historical investigation as a standard methodology to understand the origins and the features of the forest territory, as well as to develop appropriate management strategies for cultural, environmental, and social factors.
2. Cultural values should be classified, mapped and listed in inventories and systematically assessed by current monitoring processes of forest resources, both for material (e.g. landscape patterns, buildings, wood structures etc.) and immaterial elements (traditions, religious ceremonies, etc.)
3. There should be periodic evaluation of forest management in relation to cultural values.

4. Forest management plans should always minimize the risk of degradation and damage of cultural values, not only at a site level where they may have special importance, but also at a broader landscape level.
5. Forest management plans should assess the significance, integrity, and vulnerability of cultural values periodically.

3.2 Strategies and Actions in Rural Development Plans and at Operational Local Levels (RDP)

As suggested by the Pan-European Operational Level Guidelines for Sustainable Forest Management (adopted by MCPFE since 1998) and in the Vienna Resolution 3, an important opportunity to promote SFM and particularly the conservation of cultural values is represented by the National Rural Development Plans. Rural Development Plans (RDP) are also important because many EU countries have no National Forest Plan, but do have an RDP. Therefore, in some cases policies concerning forest territories are promoted through RDP rather than NFP. The potential value of RDPs in this context is also because governments and regions are not placing limitations on private activities, but rather promoting processes, through the system of economic incentives, in which the advantages of conservation outweigh the benefits associated with degradation. This is particularly important for the EU Common Agricultural Policy, characterised by agri-environment and forest-environment measures, this is alongside payments to farmers for constraints imposed by the NATURA 2000 network of protected areas. Strategies and actions proposed in this section are based on strategies and actions that can be used in the development of national environmental, forestry, and agricultural policies.

Strategies and actions proposed in this section are essential in order to translate national targets for the protection and implementation of cultural values into effective actions at the local level. They are important in order to ensure that opportunities for implementation, preservation and enhancement of cultural values are promoted, understood and rooted in policies and decisions at the local level. In general strategies and actions helps to:

1. Identify targets important to specific areas that will better reflect the values of local people

2. Stimulate effective local partnerships to ensure programmes for the conservation of cultural values are developed and maintained in the long term
3. Raise awareness of the need for implementation, preservation and enhancement of cultural values in the local context
4. Provide a basis for monitoring and evaluating local activities for both national and local level

There is also a significant scope for related actions at local levels of (self-) government, and, in particular, through the operational planning by private land managers (at corporate and individual levels) using the High Conservation Value (HCV) concept. This concept was originally devised in the context of forest certification, but has now been extended into a flexible toolkit to apply to all kinds of ecosystems and habitats for a variety of uses, including land-use planning, conservation advocacy, and design of responsible purchasing and investment policies. The concept of HCV areas specifically includes “areas critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities)”.

3.2.1 Strategy 1 – diversification of local economy and improving competitiveness

It is widely believed that traditional management practices based on cultural values can add value to the resources and services derived from particular landscapes such practices are applied on. This is more important for less productive areas where environmental and market conditions can restrict the fully mechanised timber production. In such territories measures should be taken to preserve and use cultural heritage for the maximization of the economic capacity of the forest and woodland resources. It widely accepted that the market value of wood and non-wood forest products, as well as other non-market benefits such as tourism, recreation and sport activities can be increased by the added value that is associated with the cultural landscape from which they are derived. This is a crucial factor for increasing competition of traditional local products at national and international level. Landscape resources represent a unique factor of competitiveness for each country or region that cannot be reproduced by a competitor in another country. The market value of timber or non timber products produced in a specific cultural landscape can be increased if the producer appears to care for the conservation of the cultural identity of that landscape. Furthermore, forestry and its food sector have great potential to further develop high quality and value added products that meet the diverse and growing demand of Europe’s consumers and world markets. There is also the hope to promote new

jobs and open new sectors for foresters, developing the management and conservation of cultural landscapes, as well as services and activities related to the promotion of historical and cultural heritage.

General guidelines

Any development initiative should take account of the cultural identity of the places they affect. This is in order to prevent any possible damaging effects of actions. Moreover, any new legislation should be made relevant to the cultural context that is going to be applied in order to mitigate negative effects of past and present policies applied to EU countries. Policies should pursue the preservation of cultural values where they still exist and promote their restoration wherever possible as a way of supporting the economic prospective or marginal rural areas.

3.2.1.1 Actions

Actions in local level associate with strategy 1, should aim to successfully demonstrate the connection between competitiveness of local economy and cultural values associate with forests and forestry and provide measures that will improve the use of traditional production. These should:

1. Favour the role of forest-related cultural values for the competitiveness of the forest territory and make obvious the link between traditional local products and tourism, to cultural landscapes by using marketing promotion techniques. (V3, para 9)
2. Establish advisory services supporting and informing owners on effective conservation and on the valorisation of cultural values. (V3, para 7)
3. Promote “good practice” for the conservation of cultural values and cultural landscapes (V3, para 7).
4. Support entrepreneurs’ activities that promote the conservation of cultural forestry or agro-sylvo-pastoral production systems. (V3, para 8)
5. Support cooperation between primary and secondary producer by applying measures that encourage secondary producers to use traditional products and traditional knowledge in their economic activities (V3, para 8)

6. Subsidise the restoration and conservation of structures having historical importance that are related to traditional management and production in forest and agriculture (buildings, structures for forest utilisation, machinery, tools, and other material evidence), suitable for inclusion into present forestry and farming economic activities (V3, para 10).
7. Support the use of traditional wood and non-wood products in agriculture and other industries, where possible, by compensating any additional cost derived from the use of such products in place of other modern technologies (V3, para 8)

3.2.2 Strategies 2 – improving the landscape and the countryside

The long relationship between human and nature activity has produced distinguishable landscapes for their biological diversity, ecological functions but also their aesthetic qualities. These landscapes have been shaped as such due to cultural differentiation between societies. There should be strategies that will aim to acknowledge the positive role of these societies in shaping the forest environment and improving the quality of such landscapes. They should promote the conservation of different cultural landscape patterns that reflect the identity of the different European forest regions, their different historical management practices and the biodiversity related to them. These include traditional forest management practices, the traditional uses of plants and trees, as well as timber and non-timber products. Strategies in local level should aim the evaluation of benefits of the cultural landscape and give priority for conservation to the distinguishing patterns of the landscape that maintain these benefits. By adopting this strategy not only the quality of the forested and wooded landscape will be maintained and enhanced but also aesthetic and spiritual values often assigned to their structural diversity will be sustained. Strategies should try to counter-balance not only the high rate of abandonment of traditional practices, but also the consequences of inappropriate policies favouring abandonment, the disappearance of traditional knowledge and the globalisation of landscapes.

General guidelines:

Initiative in local level should take into consideration that different and distinctive patterns on the landscape sustain biological diversity and function in different ways, therefore providing diverse benefits. Policy recommendation should be site specific in order to avoid any damaging effect on these

benefits of inappropriate management. Moreover, any initiative should be made relevant to the distinctive character of the landscape in order to mitigate negative effects of past policies. Policies should protect cultural values that enhance forests and woodlands ecosystem diversity as it is this diversity that contributes to higher aesthetic, spiritual and cultural values of these landscapes.

3.2.2.1 Actions

Actions should aim to carry out comprehensive research in determining the economic, social and environmental benefits of different forest and woodland landscape patterns. These measures should also work on to protect the specific patterns of the forest and woodland landscapes as they are connected with aesthetic, spiritual and cultural values of these landscapes. Possible actions need to be evaluated in the context of local history and culture taking into account that the protection and management of cultural landscapes and cultural values may or may not overlap with other objectives, such as nature, soil, or wildlife conservation. These should include:

1. Promotion of interdisciplinary studies for the identification, inventory, and documentation of local cultural heritage related to forestry and woodland landscapes in order to develop local 'state of knowledge' reports that would appraise local landscapes and their cultural resources (V3, para 6) (V3, para 10) (V3 para 11).
2. Restoration and management of traditional forest and woodland landscape patterns, as well as their extension, density, structure and species composition, with specific attention to those threatened by the abandonment of traditional management practices (V3, para9)..
3. Restoration and management of sites having specific historical, cultural, or spiritual significance (V3, para 9).
4. Conservation of disappearing traditional forest management practices at woodland level (e.g. selective coppice, coppice with standards, wooded pastures, pastured woods, shrub-lands *etc*) (V3, para 7).

5. Restoration of practices at single tree level in order to protect and maintain the shapes and ecology of individual trees that have been created by the application of traditional knowledge (pollarding, shredding, etc.). (V3, para 9).
6. Restoration and conservation of artefacts having historical importance (e.g. not only tools or machinery, but even systems and structures for logging, transportation, historical watershed management systems, charcoal making techniques, tar production, etc) (V 3, para 8)
7. Protection of veteran trees (especially those resulting from human influence known as ‘working trees’) both in forests and the countryside (V3, para 9).
8. Maintenance and plantation of trees outside the forest such as trees in mixed cultivation or by field margins in the form of hedges, or tree rows *etc.* according to the local traditional landscapes (V3, para 9).
9. Restoration and management of landscape patterns resulted from old agro-sylvo-pastoral systems such as wood pastures, or pastured woods, and the traditional practices through which they are maintained (V3, para 9).

3.2.3 Strategy 3 – Improving quality of life in rural areas

The conservation and development of cultural values should play an important role for the attractiveness of forest and woodland landscapes for both, visitors and local populations. The appreciation of rural areas is related not just to intrinsic environmental qualities (e.g. air, soil, vegetation etc.) but also to perceptions about the identity of a place given by the quality of its landscape. The sense of identity of a place is created by economic, social and cultural aspects, through time and space and it is made up by meanings often assigned on specific landscapes features. The preservation of such features contributes towards higher quality of life for local populations through material and immaterial means. These features improve people’s lives and make them happy by fulfilling their recreational, emotional and spiritual needs, and their sense of identity while they contribute to local economy by enhancing the aesthetic and spiritual qualities of the area and attracting visitors. Therefore, strategies should be developed that will promote activities to link the conservation

and promotion of cultural values to forest and woodland features important for the well being of local population and visitors. In this respect the recovery and conservation of traditional knowledge can play an important role for the valorisation of cultural forest heritage. Strategies in local level should support research for the uncovering wherever it is possible, of such knowledge. This is a important task as traditional knowledge has been rarely formalized into the official language of forestry therefore has in many cases been lost.

General Guidelines

Strategies should be developed to put in place regulations in local level that will aim the valorisation of cultural values and the avoidance of activities alien to the cultural identity of the place. It is important to develop integrated strategies that will engage public, forest and woodland owners and local administrations for the recovery, preservation and maintenance of those landscape elements that contribute towards improving quality of life in rural areas. These strategies should include educational programmes in order to ensure continuation of traditions in future generations.

3.2.3.1 Actions

Actions in local level associate with strategy 3, should aim to support local traditions associated with forest and woodland landscapes and disseminate them within wider environments. Also they should promote regulations that will ensure the vitality, good management and continuation of such traditions. They should include:

1. Development of information centres concerning the promotion of local cultural forest heritage (V3, para 6)
- 2 . Support for land and forest owners to promote products and services from their private woods and forest linked to cultural values that are important for the population and/or visitors to the area (V3, para 8)
3. Support for marketing of cultural heritage (V3, para 8).
4. Support to recreational and cultural initiatives aimed to inform on local cultural heritage (e.g. museums, events, tours) (V3, para 8).

5. Restoration and maintenance of sites, infrastructures and services essential to the enhancement of the cultural identity and quality of life of local population (V3, para 7).
6. Creation and support of training courses for foresters, administrators and the public on the conservation and management of cultural heritage (V3, para 6).

4. OUTLOOK - ADDITIONAL PAN-EUROPEAN INDICATORS

According to the task assigned to the expert group by IUFRO possible indicators on social and cultural aspects have been considered and proposed. This is with the aim of introducing tools to measure and evaluate the conditions and trends related to the conservation of cultural heritage. As noted by several scientists attending a discussion session on the implementation of the Vienna resolution during the Florence Conference in 2006, it is evident that the problems related to the issue of cultural factors are both significant and important to merit the creation of a completely new criterion. However, considering these guidelines as a first step for the implementations of cultural factors in SFM, we are proposing a number of indicators (that will need to be specified in terms of how they will be measured), developed according to three main categories often used in the conservation of cultural and natural heritage :

- 1 Significance*
- 2 Integrity*
- 3 Vulnerability*

The indicators listed in each category are interlinked and can be used in combination. The same indicator (e.g., single land uses) can be described or measured in terms of significance, integrity and vulnerability.

4.1 Significance

This term is applied to sites or landscapes expressing important values represented by a number of qualities that can be described by several indicators. Significance can be represented by a testimony to a cultural tradition or civilization either living or now lost; perhaps a type of building, architectural or technological ensemble, or landscape, an example of a traditional human settlement. It can be directly

or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works, representative of a culture (or cultures), especially when under threat.

1. Landscape patterns

Cultural landscapes are highly significant for local and national cultural heritage. They are characterised by specific features of their matrix, in terms of vertical and spatial diversity, ranging from dense forest cover, to pastures or fields with trees. Changes induced in the historical structure of the matrix may degrade their significance. This indicator is particularly important also because it addresses biodiversity at landscape level; a feature rarely monitored but highly vulnerable in the context of the current rapid changes in rural areas. Landscape pattern is an indicator already existing in Criterion 4 of MCPFE Improved Pan-European Indicators of SFM.

2. Single historic land uses

Single land uses due historical traditional practices (e.g. charcoal burning, pasturage, acorn production *etc*) can be considerably important for the local history. Entire landscape patterns may not be existing any more, due to changes occurred in the socioeconomic or natural conditions of a region, but single land uses can survive according to specific activities still occurring.

3. Material and evidences

This indicator is suited to assess the significance of buildings or structures associated with forestry or forest operations (e.g. utilisation, transportation, woodworking *etc*)

4. Documentary evidence

Historical written or printed documents related to forests and forestry.

4.Bio- cultural evidence

Veteran trees and culturally modified trees for the production of acorns, fodder (e.g. pollard trees), tar, resins, or other products, as well as hedges, tree avenues *etc*. significant for local history.

5. Cultural traditions

This refers to immaterial factors, such as events, ceremonies, place names, representative of ethnic groups or local communities

6. Traditional knowledge

Traditional knowledge associated to the use of trees, herbs, woods, nuts, saps; forest utilization practices, hunting techniques, management practices *etc*

7. Social perception

The perception of historical, aesthetic and spiritual qualities created by economic, social and cultural aspects, through time and space, is essential of the cultural identity of a place.

4.2 Integrity

Integrity measures the state of protection and management of a cultural landscape, a monument, or a tradition. A landscape still showing all its functionalities, at historical, environmental, and social levels, satisfies the requirements concerning the conservation of integrity. In order to maintain integrity it is necessary to maintain the elements necessary to express significance, and to monitor and assess the factors negatively affecting significance. This concept can be applied to material factors, such as architectural elements or landscapes, but even to immaterial factors such as ceremonies or traditions.

1. Extension of cultural landscapes

The integrity of a landscape is related also to the conservation of an appropriate extension of territory suited to maintain the elements needed to express significance

2. Integrity of landscape patterns

The integrity of a landscape is related to the conservation of the historical features of its matrix. This can be characterized, among other qualities, by very fragmented patterns as those linked to many traditional agro-forestry systems, or by dense, homogeneous forest covers, as well as by mixed conditions.

3. Integrity of single historic land uses

The integrity of single historical land uses is linked to degree of conservation of all their features (e.g. number, species, and health of trees in a wood pasture, *etc*)

4. Integrity of material evidences

State of conservation of buildings or structures associated with forestry or forest operations (e.g. utilisation, transportation, woodworking, *etc*)

5. Integrity of documentary evidences

State of conservation of historical archives, collections or single printed and/or written documents.

6. Integrity of bio-cultural evidence

State of conservation and vitality of veteran trees, culturally modified trees, hedges, tree avenues in order to express integrity

7. Integrity of cultural traditions

State of conservation of immaterial factors such as traditions concerning events, ceremonies, place names *etc*

8. Traditional knowledge

State of conservation of traditional knowledge associated to the use of trees, herbs, woods, nuts, saps; forest utilization practices, hunting techniques, management practices *etc*

9. Social perception

Degree of conservation of the perception of historical, aesthetic and spiritual qualities created by economic, social and cultural aspects, through time and space.

4.3 Vulnerability

Vulnerability represents the fragility of cultural factors due to the features of processes affecting significance and integrity. Vulnerability measure also resistance to change. Some landscapes are very vulnerable to abandonment, their features degrading in a relatively short time (e.g.. young coppice, shrub-lands, chestnut orchards *etc*), whilst others are less affected by the suspension of traditional practices and more resistant to changes (e.g. high stand of beech or fir). In the same way also immaterial factors such as traditions, ceremonies, or local knowledge can be more-or-less affected by changing socioeconomic conditions. Therefore, it is important to asses the different degree of

vulnerability of each item representing significance, but also the factors that can be interpreted as potential dangers.

A- Vulnerability of the elements representing significance

1. Vulnerability of Landscape patterns

Landscape patterns show fragilities and different degrees of potential degradation, according to their features and qualities of threats such as abandonment, climate change, socioeconomic development *etc.*

2. Vulnerability of single historic land uses

Fragility and potential degradation of single land uses according to their features and qualities of threats.

3. Vulnerability of material elements

Fragility of buildings or structures associated with forestry or forest operations (e.g. utilizations, transportation, woodworking *etc.*), trends of loss of knowledge of the existence of material proofs referring to the past (i.e.: ownership deeds of woodlands, historic statutes regulating forest management, etc.)

4. Vulnerability of documentary evidences

Fragility of collections, archives or single documents related to printed or written evidences.

5. Vulnerability of Bio-cultural evidences

Fragility of veteran trees, culturally modified trees, hedges, tree rows *etc.*

6. Vulnerability of Cultural traditions

Intrinsic fragility of immaterial factors such as events, ceremonies, place names *etc.*

B - Factors affecting vulnerability

1. Forest activities

Vulnerability due to forest activities presenting a potential or direct danger for cultural factors (e.g. afforestations, inappropriate silvicultural methods , forest utilisation *etc*)

2. Agricultural activities

Risk due to farming activities presenting a real or potential risk for cultural values (e.g. extension of industrial cultivation on forest-land)

3. Industrial activities

Risk due to industrial activities directly or indirectly affecting cultural values (e.g. industries polluting forest areas, or modifying the features of the forest according to market requests, as in the case of the spread of conifers for construction timber)

4. Urban development

Risk due to factors and process directly linked to expansion of urban areas or infrastructure, as well as planning activities negatively affecting the historical features of forest landscapes, architectural elements (singles houses, villages), sites *etc*

5. Demography

Risk due to demographic factors presenting an actual or potential risk for cultural values (e.g. landscape patterns very fragile to abandonment)

6. Climate changes

Risk due to the effect of possible climate changes negatively affecting cultural factors

5. TABLE SUMMARIZING PROPOSED ACTIONS FOR THE IMPLEMENTATION OF VIENNA RESOLUTION 3 AND RELATED PARAGRAPHS

<u>Strategies in National Forest Programmes</u>	
Par. 5	<ul style="list-style-type: none"> - Set up the rules for the definition of cultural values and their associated management practices across the country - Recognition of cultural values as essential elements of the diversity and richness of national cultural heritage - Identify the requirements and provide the legislation for the incorporation of cultural values into local plans for forest and woodland management - Set up procedures for the participation of different stakeholders (forest owners, public, local and regional authorities etc.) to the implementation of policies on cultural values in forest ecosystems - Inclusion of cultural values in forest planning and management - Provide mechanisms for revision of relevant policies for the dynamic incorporation of cultural values and the maximization of their benefits (e.g. rural development plans)
Par. 6	<ul style="list-style-type: none"> - Promote cultural values by including them in educational programmes and development of training courses on conservation and management of cultural values in forestry - Provide a conduit for the transmission of information to and from the national, regional and local levels
Par. 7	<ul style="list-style-type: none"> - Implementation of policies aimed at the protection and valorisation of cultural values related to environmental asset
Par. 11	<ul style="list-style-type: none"> - Promotion of research on forest history and forest related cultural values
<u>Actions in National Forest Programmes (NFP)</u>	
Par. 5	<ul style="list-style-type: none"> - Identify cultural values in the territory defining their significance, integrity, and

	<p>vulnerability</p> <ul style="list-style-type: none"> - Monitor the process of transformation - Manage such process - Define criteria and indicators for their management - Define planning tools and management techniques
Par. 8	Ensure research development in order to increase knowledge and gather evidence so that to limit actual and potential negative impacts on cultural heritage
Par. 9	- Define planning tools and management techniques
Par. 10	Manage the process of data collections and collation
Par. 11	- Ensure research development in order to increase knowledge and gather evidence so that to limit actual and potential negative impacts on cultural heritage
<p><u>Strategies and Actions in Rural Development Plans (RDP)</u></p>	
Par. 6	<ul style="list-style-type: none"> - Promotion of interdisciplinary studies for the identification, inventory, and documentation of local cultural heritage related to forestry and woodland landscapes. This also in order to develop local ‘state of knowledge’ reports that would appraise local landscapes and their cultural resources. - Development of information centres concerning the promotion of local cultural forest heritage. - Create and support training courses for foresters, administrators and the public on the conservation and management of cultural heritage
Par.7	<ul style="list-style-type: none"> - Establish advisory services supporting and informing owners on effective conservation and on the valorisation of cultural values. - Promote “good practice” for the conservation of cultural values and cultural landscapes - Conservation and management of endangered traditional forest management practices at woodland level (e.g. selective coppice, coppice with standards, wooded pastures, pastured woods, shrub-lands <i>etc</i>) - Restoration and maintenance of sites and infrastructures essential to the enhancement

	of the cultural identity of local population
Par.8	<ul style="list-style-type: none"> - Support entrepreneurs' activities that promote the conservation of cultural forestry or agro-sylvo-pastoral production systems. - Support cooperation between primary and secondary producer by applying measures that encourage secondary producers to use traditional products and traditional knowledge in their economic activities - Support the use of traditional wood and non-wood products in agriculture and other industries by compensating any additional cost derived from the use of such products in place of other modern technologies. - Conservation of traditional artefacts having historical importance (e.g. not only tools or machinery, but even systems and structures for logging, transportation, historical watershed management systems, charcoal making techniques, tar production <i>etc.</i> - Support land and forest owners to promote products and services from their private woods and forest that linked to cultural values and are important for the population and/or visitors of the area. - Support to marketing of cultural heritage. Support to recreational and cultural initiatives aimed to inform on local cultural heritage (e.g. museums, events, tours)
Par.9	<ul style="list-style-type: none"> - Favour the role of forest-related cultural values for the competitiveness of the forest territory and make obvious the link between traditional local products and tourism, to cultural landscapes by using marketing promotion techniques. - Restoration and management of traditional forest and woodland landscape patterns, as well as their extension, density, structure and species composition, with specific attention to those threatened by the abandonment of traditional management practices - Restoration and management of sites having specific historical, cultural, or spiritual significance. - Restoration of practices at single tree level in order to protect and maintain the shapes and ecology of individual trees that have been created by the application of traditional knowledge (coppicing, pollarding, shredding, etc. - Protection of veteran trees (especially those resulting from human influence known as 'working trees') both in forests and the countryside. - Maintenance and plantation of trees outside the forest such as trees in mixed cultivation or by field margins in the form of hedges, or tree rows <i>etc.</i> according to

	<p>the local traditional landscapes.</p> <ul style="list-style-type: none"> - Restoration and management of landscape patterns resulted from old agro-sylvo-pastoral systems such as wood pastures, or pastured woods, and the traditional practices through which they are maintained
Par.10	<ul style="list-style-type: none"> - Subsidise the restoration and conservation of structures having historical importance that are related to traditional management and production in forest and agriculture (buildings, structures for forest utilisation, machinery, tools, and other material evidence) in forestry and farming
Par.11	<ul style="list-style-type: none"> - Promotion of interdisciplinary studies for the identification, inventory, and documentation of local cultural heritage related to forestry and woodland landscapes. This also in order to develop local ‘state of knowledge’ reports that would appraise local landscapes and their cultural resources.

6. General bibliography

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